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THERE is a state that has only 40 school districts, and it's very happy about the whole thing. Progress has followed consolidation.

Here is a paragraph lifted right out of the middle of next month's issue; the author, Charles H. Skidmore, Utah state superintendent:

"It was my pleasure a few years ago to examine the total yearly expenditures and school offerings of Utah and of a neighboring state of similar conditions and like size having 1300 school districts to Utah's mere 40. It had 750 one room schools compared with only 90 in Utah at the time. Utah had 10 per cent more of the children of the school census in school for a longer school year than its neighbor. The bonded indebtedness for the neighboring state was 31 per cent higher and the cost per pupil for education was 27 per cent higher than in Utah. Furthermore, the salaries of teachers in Utah, which were far too low, were 22 per cent higher than the average salaries in the neighboring state."

Schoolmen interested in district reorganization will prize this article.

ANOTHER success story will follow on the heels of Superintendent Skidmore's. It is a social interpretation story with a happy ending. The locale is the Lincoln Consolidated Training School at Michigan State Normal College.

The elementary grades had a visiting day for parents that proved popular beyond all expectations. But the same formula when applied to junior and senior high school pupils met stubborn resistance. The self-conscious adolescents were firm against parental invasion of the classroom.

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Leland B. Jacobs, supervisor of English, has written down for your midsummer reading the result of the collective thinking of the faculty and the student council on the situation. Watch for this second August success story.

IN THE high school at Albuquerque, N. M., the science department has made a 300 per cent gain in enrollment in the last eight years. Moreover, it confidently expects to keep on growing. Crews of science pupils go out from the high schools, on request, to give demonstrations in the elementary schools. The grammar school children sit goggle-eyed while the high school Houdinis pull scientific tricks out of their bags. The high-schoolers work up their own "patter" to accompany the tricks. They can be as breezy and original as they please, the only limitation being veracity.

BELIEVING that all men, and more especially schoolmen, need more color in their lives, The NATION'S SCHOOLS two and one-half years back, began a rotation of colors on its covers. The change met approval, and has been followed in 1938 by a campaign to bring more color into drab and dingy classrooms and corridors. Except for the March convention issue every month has brought suggestions for painting, decorating and otherwise enlivening school interiors.

Now comes California, acknowledged leader in modern architecture, to point in its new Santa Monica schools to a daring use of color on school exteriors. Next month Laura Crawford, director of public relations for the school system, will describe the studied use of color on the various buildings. Visitors come from long distances to see these structures.

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LOOKING FORWARD

A Dangerous Bill

THE Harrison-Fletcher Bill of 1937, providing a method for distributing federal aid to public education to the several states, has been replaced by the Harrison-Thomas Bill which purports to have embodied in its revised form all of the recommendations of the report of the President's Advisory Committee on Education. Since unusual pressure will be exerted on school systems and professional organizations to use all efforts to obtain its passage, an examination of these claims seems desirable.

The Advisory Committee on Education was brought into existence, first of all, to analyze the results of twenty years of operation of the Smith-Hughes Act. Its second assignment was to study the needs of education and desirable federal relations to education as advice to the President and the Congress. More than half of the time required to complete the study was devoted to intensive examination of federal relations to vocational education. A large portion of the report is, therefore, concerned with its findings in vocational education and with specific recommendations for fundamental changes in the Smith-Hughes Act, which is now the basis for federal administration of vocational education.

The alarming conditions of increasing federal domination and control in the vocational area led the committee to develop ten fundamental principles upon which all future federal relations to public education should be based. Not only were these principles established as the general basis of the report but the committee thought them to be so important that they are repeated with frequency in the more detailed sections.

Does the Harrison-Thomas Bill conform to the principles and all of the recommendations of the Advisory Committee on Education?

It does not.

In the first place the recommended reforms in the Smith-Hughes Act are ignored except for a section on fair labor standards. The reason given is that they may be considered in a separate bill. The actual reason is that the American Vocational Association, the pressure group interested in the extension and increasing of special federal aid to education and the maintenance of a separateness between vocational and general education, refused to agree to the inclusion of these changes. It is entirely possible that those individuals interested in lobbying for a federal aid bill considered it a matter of wise political strategy to recognize the desires of the vocational lobby. Highly essential reforms in existing federal legislation are therefore largely neglected in the proposed bill.

The report of the Advisory Committee on Education provided an unusual number of safeguards against federal control and domination of the state and local educational programs. These principles were not incorporated in the bill. On the other hand, as written, the U. S. Commissioner of Education is given unusual discretionary powers. His importance in the scheme of things is evidenced by more than 70 instances of direct naming.

Taken as a whole the Harrison-Thomas Bill, instead of correcting the undesirable features of control that have grown up in the administration of the Smith-Hughes Act, appears in reality not only to have ignored them but to have provided means whereby the same type of interpretive control may be progressively extended to other areas of education for which the bill provides grants-in-aid. It is reasonable to expect that enactment of this bill into law might have a most profound effect in changing the entire character of public education in the United States. If at this time in view of the time and money spent on the report of the Advisory Committee on Education it is politically impossible to correct the dangers of federal program control in the vocational area it requires an unusual amount of optimism to assume that the proposed bill will do anything except extend these undesirable tendencies. It is without doubt the most dangerous of all bills through which federal aid for public education has been proposed since the writing of the Smith-Towner Bill in 1919.

Attitude toward the Harrison-Thomas Bill has no relationship to the need for federal funds to equalize educational opportunity between states. The need of the southeastern states is particularly great. However great the current inequalities between the states, there is little rational justification in the support of a meas-

ure to obtain immediate relief that may have extremely grave effects on the future of public education in the United States.

Conservative-Progressive

THERE appears to be a great teapot tempest in certain educational circles because of the recent sharp alignment between methodology progressives and conservatives. Some twenty years ago those who followed the Dewey philosophy, the scientific movement in education and the implications of present day general and educational psychologic research banded together as progressives, forming an organization of their own, the Progressive Education Association. Their reason for maintaining separateness from other professional organizations was the feeling that the conservatism of the National Education Association might hamper their experimental efforts.

Progressive education has been no exception to the general principle that every major movement has its lunatic fringe. When in recent years the more ardent progressives began earnestly to interweave their methodologies with prevailing concepts of social regeneration and to turn social missionaries, the result was a crystallization of conservative opinion against them. This year at the Atlantic City meeting this conservative reaction took the form of another organization which profoundly took unto itself the title "Essentialist." The progressives immediately labeled the infant organization as one of reaction. The Essentialists left no one in doubt as to their opinion of the ultra-progressives.

This alignment of different fields of opinion is a perfectly sound one. For years the progressives have been aggressively evangelizing for their pet theories and practices. They cannot hope to find complete agreement from all other members of the teaching profession. It is perfectly valid to assume that not all knowledge has yet been revealed to the Progressives or that all forces of blind reactionary thought exist among the followers of the essentialist movement. Sane progressivism is based on sound principles of procedure but more advanced practices should certainly be subjected to the keenest possible scrutiny to make their validation possible. It is also perfectly fitting that questioning be done within the teaching profession rather than from the outside.

The struggle between progressive and conservative should do much to make sounder progress possible. While it may cramp the more violent fringe of progressive practice by demanding more objectivity and less emotion, such curbing actually may be a help rather than a deterrent to progress. Except for the newspaper headlines and the apparent desire of both sides to try their case before a lay public that probably understands little of the professional patter or real issues involved, this sharp alignment ultimately should be helpful to educational practice.

For those who wish to delve deeper into some of the issues at stake, a thoughtful reading of "Progressive Education at the Crossroads," written by Boyd H. Bode, himself an outstanding progressive, is recommended. In the meantime let the argument between the two schools of thought go merrily on, but let's keep it within the family to prevent the neighbors from misunderstanding.

Youth Survey

AS PART of its wide study of youth problems, the American Council on Education recently has published a monograph titled "Youth Tells Its Story," the results of carefully planned and carried out interviews with 13,528 residents of Maryland between the ages of 16 and 24 years.

Much might be said in praise of the conduct of this research but our immediate interest is greater in the results. Five groups of problems in terms of statistical emphasis evolved from this study. As a general problem economic security ranked first with an emphasis of 57.7 per cent; conduct and morals, a weak second, with 11.1 per cent; education and vocational choice, third, with 10.6 per cent; home, recreation, and a series of minor problems make up the balance.

Youth seemed most concerned about getting a job, having some measure of economic security and receiving a satisfactory wage. The majority were in favor of restricting child labor and in favor of employment of married women. Only slightly more than half of those over 21 years had exercised the right of suffrage; the others appeared indifferent to the responsibility of individual participation in elections. More than half of those interviewed admitted drinking, with only one-fifth unqualifiedly opposed. The majority felt that war was both preventible and needless, but stated that they would go if they were drafted.

The general attitude of these youth toward the school both in its vocational and cultural aspects was probably better than might have been expected. This result agrees with the reasons given for leaving school. Approximately one-fourth left because of lack of interest while 54 per cent, a most significant total, were forced to leave because of economic reasons!

In general, the results of this study appear to indicate little change in the thinking of the younger as opposed to the older generation. The youth problem seems to be primarily the age-old problem of adjustment of the oncoming generation to the economic system, made doubly hard in recent years because of the depression period. An educational program more in harmony with present day vocational and cultural and civic needs is a vital need while community provision for recreational facilities seems to be imperative.

One of the most outstanding findings by far is that 54 per cent of the youth were forced to leave because of economic inability. It should give those who talk most about equality of educational opportunity food for serious thought. Equalization of tax burdens and the adjustment of school programs to individual needs are only part of the general need for equalization. Until economic inability to participate in the program is eliminated through making adequate scholarship provisions so that youth may take advantage of these opportunities, our equalization slogan must remain empty of meaning in the majority of cases of children forced to leave school.

This study is so important in some of its findings that it should be repeated in states of other types as soon as possible.

Edwin C. Broome

THE retirement of Edwin C. Broome as superintendent of the Philadelphia public schools at the age of 64 because of impaired health removes another well-known leader from the field of school administration. He has been on leave since January 1938, in an effort to regain full health. A native of Rhode Island, where he was born at Central Falls in 1874, he received his early and university training in Rhode Island, was graduated from Brown University in 1897 and completed his master's degree there in 1898. His doctoral work was completed at Columbia University.

Doctor Broome was successively high school teacher, high school principal, college teacher and superintendent of schools. In the last capacity he served at Rahway, New Jersey; Mount Vernon, New York, and East Orange, New Jersey, until 1921, when he was chosen to head the Philadelphia schools. He took charge during the trying postwar period and remained there until his retirement from active service last January. Several summers were spent teaching administration in college and university.

Active in professional organization, Doctor Broome was elected president of the Department of Superintendence in 1931-32 and was chairman of a number of important committees, including those on the curriculum and on propaganda in the schools. He also held many other positions in the state professional organization. Doctor Broome joined The NATION'S SCHOOLS staff as editorial consultant in 1931 and became a member of the editorial board in 1933, in which capacity he served ably until June 1938.

His work and influence as an educator have been recognized by numerous colleges and universities, which conferred upon him at different times, *causa honoris,* the degrees of doctor of education, doctor of law, doctor of letters and doctor of humane letters. Columbia University awarded him its honor medal "for distinguished service in education" in 1932.

Doctor Broome's chief interests were scholarly and to his work in administration he brought a broad philosophy and a well-balanced social point of view. While reserved and serious minded, he occasionally relaxed into lighter moods and small intimate group gatherings found him both stimulating and entertaining. The peculiarities and complex organization of the Philadelphia schools made it difficult to obtain acceptance of all of his ideas, but he tried valiantly for more than sixteen years not only to maintain but also to improve the program and the work of the schools. Those who knew him best will regret his leaving and express the hope that he will again participate actively in professional affairs when he regains his physical strength.

A Command

RECENTLY James A. Farley, postmaster general of the United States, conceived the idea that it would be a good thing for the air mail service to celebrate its twentieth anniversary on May 15 by the observance of a National Air Mail Week. The people were to be made more completely conscious of this service and its importance to the country during this period through intensive publicity and carefully planned programs. With this idea and the program developed there will probably be little disagreement. Air mail service is an important means of speeding up written communication and a greater consciousness of its value by the people probably will result in greater use and, hence, lower rates.

Those in charge of the program, however, quickly turned to the public schools and attempted to impress them into active participation. There was no suggestion of cooperation, no question as to whether directing the development and writing of thousands of essays fitted into the work of the schools. There was merely a demand to take part. Notices were apparently sent from Washington, copied by the postmaster in each community and sent directly to the principals of individual schools. One of these letters is reproduced:

"The Post Office Department plan to observe the twentieth anniversary of the inauguration of air mail service on May 15 and to celebrate this event by the observance of a National Air Mail Week.

"The department desire that schools and educational groups take an active part. To that end, I am enclosing rules and regulations relating to Air Mail Week Poster Contest."

This rather peremptory demand to participate came at a time when many schools, especially those with shortened semesters owing to lack of finance, were in the midst of the heaviest work of the year.

The Editor

Top: Social workers give a group of mothers practical directions for health care. Center: A special occasion in the school at Torreón, Mex. Bottom: Pupils ready to march in a parade extolling the advantages of temperance.

"Children

MEXICO has a peculiar and interesting type of school known as "Children of the Army" *(Escuelas Hijos del Ejercito)*. Although so designated, the schools are not what the name may imply. They are centers for the all-round education of children and other immediate relatives of soldiers in the Mexican army and indirectly of the soldiers themselves.

An ambitious boy who aspires to a military career may prepare for it in one of these schools if he shows the requisite aptitudes and abilities, as certain military exercises are practiced, but he receives no more attention or recognition than other boys who wish to become farmers or shop workers. Vocational guidance is given after the sixth grade. Care is taken to avoid placing round pegs into angular holes.

Soldiers in the Mexican army are expected not only to defend their country in time of war but also to promote its progress in time of peace. It is essential, therefore, that they and their families be educated and informed with respect to the aims of the government and that they develop an intelligent and active sympathy with its employment of education as an effective lever to raise the general cultural level. Hence, it is necessary that the army itself should become a school and that the children of army men should be provided with educational opportunities equivalent to those of children born in more favorable economic and social conditions.

Mexican soldiers are drawn usually from the farm and the shop. After their period of enlistment they generally return to their community and to their own accustomed occupations. They are peasants, *campesinos,* industrialists and *proletaires.* They are not expected or encouraged to "rest upon their laurels," even if they are scarred or crippled. They go to work, usually in their former oc-

of the Army"

I. W. HOWERTH

cupations. For this they need to be inspired with knowledge and new zeal.

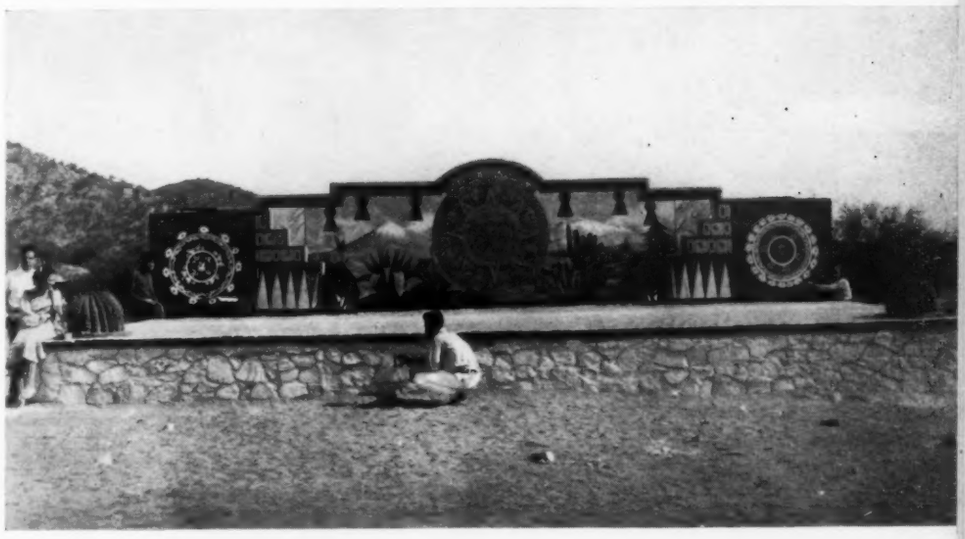
Soldiers, moreover, are necessarily seminomadic, moved about at the will of the government and, consequently, are out of intimate touch with their families. Their children are neglected, particularly with respect to educational opportunities. These conditions called for a remedy even on merely humanitarian grounds.

Soldiers and their families constitute a special and distinct group in the heterogeneous Mexican population. A primary aim of the revolutionary Mexican government is to unite all elements in the common task of national, social and economic transformation. It was quick to see that education adapted to the purpose is an indispensable means. Therefore, there must be schools especially organized and conducted to enlighten all the various groups living on different levels of development and culture—industrial, social and racial. Schools for the army group were a logical necessity. Hence the *Escuelas Hijos del Ejercito.*

These schools were born of the initiative of the present president of Mexico, Lázaro Cárdenas, in 1935. Although new and necessarily experimental, they already are showing definite and satisfactory results. They are federal schools under the general control and direction of the minister of education, Lic Gonzalo Vasquez Vela, conducted under the immediate supervision of the head of the department of higher technical, industrial and commercial education, Ing. Juan de Dios Batiz.

This department, one of the major divisions of the federal system, is divided into seven sections of which *Hijos del Ejercitos* is one. The six others are: (1) prevocational and vocational, (2) professional, (3) special, (4) technical and cooperative, (5) inspection and (6) administration.

A cinder track, permanent bleachers and plenty of room for games are features of the playground below. Intricate Mayan design and lavish color mark the open air theater (center). Insects and flowers mounted by the "Children of the Army."



Although only one of the eleven major divisions under the ministry, schools in this special department cover a wide educational area. Today they offer instruction and training to more than 16,000 pupils.

Eleven "Children of the Army" schools have been established or projected. They are well scattered, as their nature and special function require. Two are in Mexico City, and one in each of the following: Patzcuaro, Guadalajara, Tlaxcala, Torreón, Zacatecas, Durango and Hermosillo. Those projected are in Guerrero and Chiapas. Others have been ordered for Puebla and Mérida. The average attendance in those now functioning is approximately 400.

In character these schools are co-educational federal boarding schools. Coeducation in Mexican schools is experimental but is proving practical. Discipline is strict though not arbitrary or in a manner to discourage initiative. Pupils are provided with lodging, food and clothing. They must live in the schools but are permitted to visit their parents or guardians once a week. Interchange of visits by pupils, parents and guardians is encouraged. Care is taken not to break or weaken the ties that bind the children to the home and the community. Even the partial realization of the Mexican ideal of social redemption and transformation requires a reciprocal current of interest, sympathy and educational influence between the school and the home. These schools are adapted to that end.

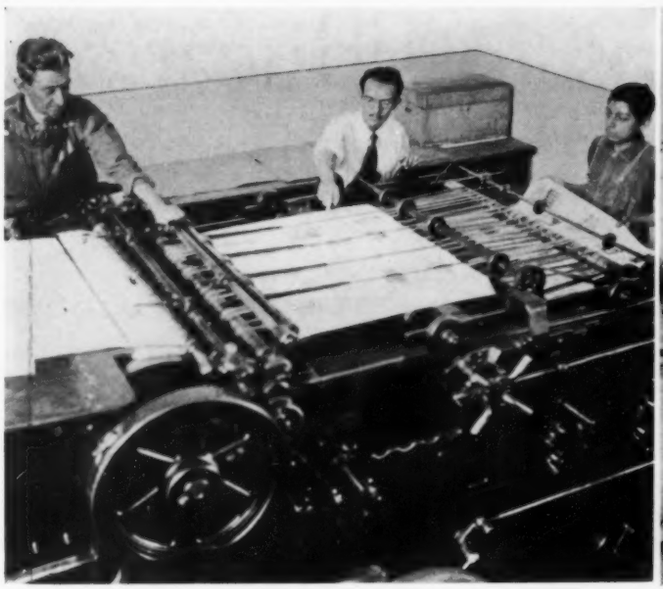
Above: The juvenile section of the Red Cross appears in marching formation. Below: Pupils are housed in dormitories like this one in Guadalajara. Home ties are maintained by weekly trips home and parents are encouraged to visit the school.

The possibilities and necessity of adult education, directly and also through the instructed children, are not forgotten or neglected. The prime test of all the schools of Mexico, indeed, is not merely the progress of the child but also that of the home, the community and the state.

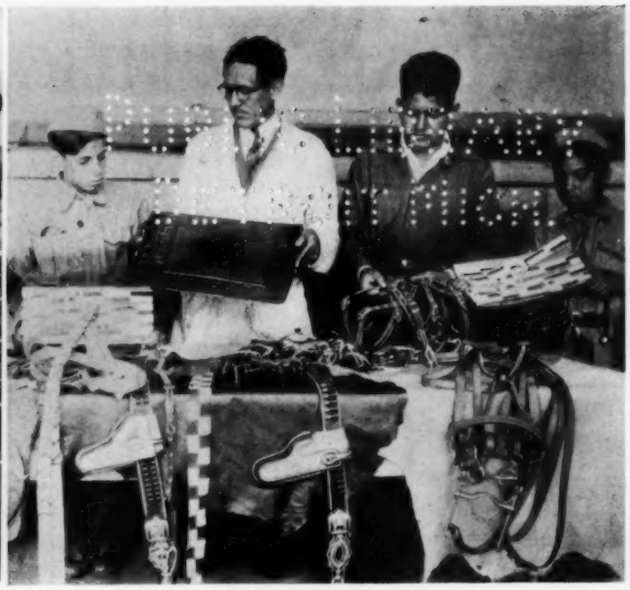
From what already has been said, the nature of the curriculum in "Children of the Army" schools might well be divined. It is the curriculum of the socialist school especially adapted. The key word in Mexican education is adaptation. Mexico was fortunate in that, after the success of the revolution, it could begin its educational task almost with a clean slate. Education was not a gigantic vested interest. It could and did disregard the traditional and established curriculum. This is as true in "Children of the Army" schools as in those of other groups.

What was needed most of all was a knowledge of how to live, eat, sleep, work and play; how to improve and preserve health and sanitation; how to produce and evaluate the social and economic goods of life and to understand and appreciate nature, and how to lend a hand in promoting the well-being of home, community and state. Mexican education, therefore, is intensely practical and closely related to community needs and the general social purpose.

Every fully established school is provided with mechanical, electrical and carpentry shops and with farm or garden. There also are tinshops, blacksmith shops, tanneries and shops for plumbing and masonry. There are opportunities, too, for agricultural work and for the breeding of domestic animals. The purpose is to provide each child with work suited to his tastes and capacities. Special attention is given to home



Each child is given work suited to his tastes and special capacities.



Many show a natural aptitude for original design in leather work.

and field work and other industrial activities that are suited to girls.

From the beginning, the children are taught to work and to like it. They are made familiar in the primary grades with the instruments of labor and the products of industrial effort as well as with the products and phenomena of nature. Academic classroom instruction is not neglected, but it is made subservient to the activities of life. A visitor is more likely to find a group of youngsters in the field or in the shop than in the classroom. Pupils may be seen surrounding an instructor who is showing them how to select seed, how to plant, to cultivate or to harvest, or how to make things of use, beauty and commercial value; or else they are doing these things themselves. In short, they live by doing on the theory that education is inseparable from life. They are early taught, too, that all useful work is honorable, since it tends to promote both individual and general well-being.

Nature is said to provide her children with strength and skill for their necessary future activities through play. "Children of the Army" schools provide healthful recreation and use both play and work for promoting the activities of life both present and future, never losing sight of the great social purpose of incorporating both the soldiers and their families in the task of redeeming the Mexican population from ignorance, poverty, vice and crime.

In September 1936, a review was established *(Revista Hijos del Ejercito),* amply illustrated and well-edited. It is devoted to the work and purpose of the new educational institutions. In its initial editorial it declared that the schools have a quadruple objective: (1) social, in that they aim to synthesize collective betterment through the incorporation of a hitherto neglected group; (2) economic, to prepare this group to participate in the economic struggle on the same plane as the members of other groups more favorably situated; (3) to aid in the construction of a pedagogic system based on the doctrine or directed activity, and (4) political, to discharge a political obligation of the government to provide equal education for the army.

Future social workers learn the rudiments of health and sanitation in a school in Mexico City.

In the achievement of the last purpose the government meets the charge of indoctrination. It would perhaps reply, "If scientific instruction is indoctrination, make the most of it."

To sum up, the idea of the schools is a logical implication of the present educational plan and purpose of the Mexican leaders in politics and education: to create a new nation freed so far as possible from the ignorance, poverty, vice, superstition, class and racial tyranny from which the bulk of its population has suffered for four hundred years. It involves the scientific enlightenment and the economic and political emancipation and cooperation of all groups of the population.

Groups are so diverse, socially, economically and educationally, that different kinds of schools are required to meet divergent needs although all are aiming at the major objective of social redemption. Soldiers and their children and relatives are an important group. Hence, *Escuelas Hijos del Ejercito.*

Federal Relations to Education,

HARRY S. GANDERS

THIS article aims to present a highly condensed comparative summary of what are probably the two most important reports ever made in this country on the problem of federal relations to education.

The first, transmitted to the President in October 1931 by Chairman C. R. Mann, was the report of the Hoover National Advisory Committee on Education. This committee appointed by President Hoover consisted of 52 members, 39 of whom were professional educators. There were also 32 cooperating representatives appointed by 11 federal departments. In addition, there were 14 cooperating committees appointed by national associations, 40 research collaborators and 55 consultants. A technical field staff of 11 experts worked under the direction of Dr. Henry Suzzallo.

During the month of February 1938, a second President's Advisory Committee on Education submitted to Mr. Roosevelt a 224 page summary based upon reports of several score nationwide studies. The studies were made by approximately 100 research workers under the advisement of 6 educational and 17 lay members of the advisory committee. Dr. Floyd W. Reeves was chairman of the committee and director of the studies.

Common bases for both reports were facts that have been revealed by research in the field of finance and federal relations to education. Both base their reports upon the fact of the inequality of ability to support education, the unevenness in present educational offerings, the mobility of ignorant as well as educated populations and the experience of the nation with various types of federal grants.

The Reeves report, as would be required by recent national emergencies, has gone further into the facts regarding the emergency needs of youth, adult education, library service and vocational rehabilitation.

Both committees recognize the importance to democracy of at least a minimum educational program throughout the nation. Both appreciate the fact that some states have programs too meager for safety to democratic institutions. Both recognize the basic need for federal aid in financing education. Both groups suggest that the amounts and methods of all grants be subject to periodic review. Both groups recommend that the nation discontinue the policy of requiring that federal money be matched by the respective states.

There are essential differences in the policies accepted by the two groups. The 1931 report recommends a single fund to be used by states for general education as states see fit. The 1938 report also recommends that most of federal funds go for general elementary and secondary education but would continue special grants for purposes of stimulation in the fields of building construction, library, extension and adult education. All of the states do not at the present time have a unitary administrative setup by which a general fund could be administered in consideration of various types of education in the states.

Allotments for Inequalities

Both groups would have federal aid distributed to lessen educational inequalities, but the 1931 committee recommended the simple plan of awarding funds to the states in proportion to the number of children of school age. Doctor Reeves' group has gone further and its recommendation is probably more in harmony with recent research findings and the refinement of educational theory. It recommends that the allotments be made by means of a complex and objective formula based upon financial ability (determined by the Treasury Department), number of children of school age (determined by the Census Bureau), the ratio of enrollment in elementary and secondary schools, the sparsity of population and other factors.

The formula would be devised by the U. S. commissioner of education after consultation with a council of chief state school officials. The bases for the formula agreed upon would be subject to approval by the secretary of the interior. The one exception would be the flat grants given to the states for the improvement of the state departments of education.

The 1931 report implies equitable distribution among Negro and white children. The Reeves committee specifically makes such an equitable distribution a special condition for receiving the grant.

Most Important Difference

The most fundamental difference between the two reports is that in the 1931 report it is specifically stated that there shall be no federal control. The Reeves report states that, as far as possible, administration, curriculum and method shall be left to state and local jurisdictions, yet there is an idea of joint planning that runs through the report. The commissioner of education usually acts after consultation with the chief state educational officers, but there must be agreement. The 1931 group would leave even the determination of purposes to the state and local units, but the Reeves report wants purposes broadly but explicitly stated through federal legislation.

Another fundamental difference in policy pertains to the different attitudes of the two committees on the matter of federal aid for nonpublic school children. The 1931 group was interested in the public schools only. According to the 1938 report, states could, if they so desired, use federal funds for nonpublic school children for health and welfare materials of instruction, transportation and scholarship. The conditions of such use would be determined by states or by

1931 and 1938

Dean Ganders of the school of education at Syracuse University makes some striking comparisons between reports of the 1931 and 1938 advisory committees on the problem of federal relationships to education

local jurisdictions if states should choose to delegate such determination to local units.

According to the 1931 report, special grants are to be continued but the federal authority for approval or rejection of plans is to be discontinued. All laws that tend to give the federal government power to interfere with the autonomy of the states in matters of education are to be repealed or changed. The only restriction placed upon general aid is that states must agree to report to a "Federal Headquarters for Education" on all questions about which headquarters may request information on matters pertaining to the manner in which grants were used. The federal audit is to be definitely restricted to the question as to whether federal money was used for education. The report specifically states that the audit is not to be used as a method for indirect control.

The 1938 report makes as a condition of federal grants, "effective systems to provide [to the U. S. Office of Education] prompt and accurate reports" and an adequate state administrative agency for management of the federal funds. Another condition of the grants is that there must be included in plans for use of the money adequate provisions for safeguards against industrial and commercial exploitation of children.

The federal audit, according to this report, is to be of more significance. It is specifically stated that the U. S. Office of Education could suspend payments to states after notice and hearing if the states failed to maintain adequate administrative machinery and accurate and complete accounts. It is on this point of the federal relation to states that there is likely to be the most controversy.

The 1938 report recommends that purposes of grants should be "explicitly but broadly recorded" by the federal government. The purposes are to be controlled by the federal government although it is definitely recommended that the administration, content and processes of education must be left to the states. There is a basic assumption of cooperative planning between the federal and state governments.

All federal aid in the 1931 report is to be general aid for public education, expendable for any educational purpose the state itself determines. General aid is to be distributed to states on the basis of educational and financial studies, and grants are to be made for definite periods subject to review every ten years. The only restriction is the necessity to report upon the use of the monies to the "federal headquarters."

Most, not all, of aid in the 1938 report is to be for general education and some may be used by the states for nonpublic as well as public school children. Grants are to be initiated with amounts of aid specifically indicated for a six year period, beginning with $40,000,000 for general aid in the fiscal year 1939-40, running to $140,000,000 each year through 1944-45. Amounts for reading materials are to be separately appropriated. Federal law shall control the purposes, and state and local jurisdictions, the administration, curriculum and method. Joint planning and a careful audit are to ensure use of funds for proper purposes.

Special grants (1931) for agricultural education and research, rural extension for adults and vocational education are to be continued at least five years and until the results of a finance survey can be used for future determinations. No new grants are to be made for special types of education, nor are existing grants for special aid to be increased.

Special aid (1938) is to be used for stimulation. Three special funds are to be used to enhance the value of general aid to elementary and secondary education. They are: a fund for the improvement of teacher preparation of $2,000,000 for the fiscal year 1939-40, $4,000,000 for fiscal year 1940-41 and $6,000,000, annually through the fiscal year 1944-45. Allotments are to be made in proportion of general aid. The money can be used by departments and colleges of education and teachers' colleges on the basis of joint plans by federal and state officials.

The second special aid to enhance the value of elementary and secondary education is for the encouragement of school district reorganization and school housing. The recommendation is for $20,000,000 for the fiscal year 1939-40 and for $30,000,000 annually through 1944-45. The grants are to be conditional upon state plans and formation of more desirable attendance and administrative areas. Individual building projects are to be reviewed by state education departments and the U. S. Office of Education. Allocations are to be on the same basis as general aid to elementary and secondary education.

Improved State Departments

The third such special aid is for the improvement of the administration of state education departments. The sums are to be $1,000,000 for the fiscal year 1939-40, $1,500,000 for 1940-41 and $2,000,000 annually through 1944-45. Of this money $5000 goes to each state each year as a flat grant. The remainder is to be distributed on the same basis as that used for general aid to elementary and secondary education.

This grant is to be conditioned upon the states' continuing their present support for their departments, and there is a condition of adequate reports and audits. The money can be used for general expense of the departments other than

for boards and commissioners. The use of the merit system in appointments of subordinate personnel is a requirement.

The basic statute controlling special aid for vocational education is to be repealed and changed to correct weaknesses and specifically to strengthen local administration.

Present grants for vocational rehabilitation are to be continued but a survey is recommended, looking toward bringing about a better coordination with other government agencies.

Special aid is recommended for libraries, amounting to $2,000,000 for the fiscal year 1939-40, $4,000,000 for 1940-41, and $6,000,000 annually through 1944-45. The grant is to be distributed to states in proportion to their rural populations. It is conditional upon the state maintenance of statewide free library service; plans are to be developed jointly by the federal authorities and the state agencies.

Would Merge C.C.C. and N.Y.A.

A major contribution of the 1938 report pertains to problems of youth 16 to 24 years of age. It is recommended that N.Y.A. aid to students from 16 to 24 be continued through 1945. Amounts are to be determined by Congress but are to be a part of the regular federal budget. It is suggested that the bureau of labor statistics be assigned the responsibility for maintaining an occupational outlook service. The U. S. Employment Service would be authorized to establish a permanent counseling service in public employment offices. The staff in the U. S. Department of Labor devoted to reviving apprenticeship training would be doubled. The C.C.C. and N.Y.A. would be merged into a new National Youth Service Administration which would carry on until 1945.

It is suggested that work camps of the present C.C.C. and work projects of the present N.Y.A. be located near existing educational institutions with the federal government furnishing transportation of youth to the latter, and also aiding existing institutions in providing appropriate programs for this group. The C.C.C. would be placed entirely upon a civilian basis, which is a recommendation that should receive enthusiastic support from all interested in nonmilitary education. If recommendations aimed at increasing aid to youth were accepted, the educational features of the N.Y.A. and C.C.C. would be greatly enhanced.

Another feature of the 1938 report not found in the earlier recommendations of the Hoover committee is a suggestion of a special grant for adult education. Five million dollars would be appropriated for the fiscal year 1939-40, $10,000,000 for 1940-41 and $15,000,000 annually through 1944-45. The purpose would be to stimulate the states in their efforts to provide adult educational facilities. Expenditures would be planned by a state council on adult education and expenditures could be made through schools and extension divisions of colleges and universities.

The 1938 report recommends that if general work relief programs are to be continued emergency adult education programs be continued also. This recommendation does not differ materially from that made by the Hoover committee in 1931 which recommended aid for meeting some special and transient crises involving education, but it recommended the restriction of the grants for research, reporting and obtaining cooperation among states and communities.

Both committees recognize the necessity for an interdepartmental committee at Washington, the function of which would be to coordinate the educational activities of the various bureaus and divisions.

The 1931 committee, recognizing the importance of the free flow of ideas, recommended the selection of appropriate commissions to represent American educational theory and culture in foreign countries, to study foreign education and in every way possible to obtain closer coordination of the administration of passport visas.

Both committees stressed the necessity for better coordination of research and the necessity for the expenditure of large sums for research and the dissemination of information. Both groups would effect coordination in research among federal bureaus through an interdepartmental council or committee. The Reeves report recommends a special fund for research, demonstrations and planning, 40 per cent of which would be expendable by the U. S. Office of Education directly and the rest, by the states under the Office of Education cooperative supervision. The Reeves group apparently has more faith in federal planning than had the Hoover committee of 1931. The National Resources Committee or a permanent national planning board, if established, would be responsible for long range social and economic planning for education.

The 1931 group recommended a Department of Education with a secretary of education at its head, with functions similar to those assigned the department in 1867. The Reeves group seems to suggest the continuance of the U. S. Office of Education as a subdivision of either the Department of the Interior or a new Department of Health, Education and Welfare.

Advisers to National Headquarters

Both groups recommend the creation of an interdepartmental council to coordinate the work of educational agencies in the national capital but, in addition, the Reeves committee recommends the creation of an educational council of chief state school officials which in a sense would function partly as a directorate and partly as an advisory group for the U. S. commissioner of education. Reports emphasize research as a major function for the national headquarters but the 1938 report would add to this function the administration of federal grants. Both recommend the abolition of the federal board for vocational education.

In comparing the two reports made by the two different Presidents' advisory committees, it will be found that both groups accept the basic fact of need for federal aid. The 1938 report, made during the depression years, naturally places more emphasis upon emergency aid and also upon special needs that have developed during recent years. Probably the main differences are concession to aid for nonpublic school children and more forthright insistence upon a measure of federal participation in control of purposes for which federal grants are to be used.

Teaching by Special Table

MILDRED EDDY

A CLASSROOM? Yes, a place of business with the atmosphere of a home, a laboratory in which boys and girls are experimenting with ideas, a workshop in which character is being developed.

Progressive educators agree that activities of small groups encourage and provide for the growth of the child as an individual and that the natural results are self-confidence, a spirit of cooperation, originality, broader vision and an incentive toward research. Many classrooms are organized with these ideas in mind, but the pupils of the junior high department of Mason School, Omaha, Neb., feel that they have a distinct advantage over others because they are using tables designed especially for group or committee work.

The unusual shape of the tables provides for comprehensive discussion by small active groups. The seating arrangement eliminates restraint and permits a free and spontaneous exchange of ideas. A spirit of tolerance and friendly criticism is engendered. Unity of purpose is maintained by the chairman of the committee. His position, which sooner or later is enjoyed by each member of the group, is a special feature. A seat in the recessed part of the table flanked by the bookcases gives an air of distinction to the chairman's position and even the least aggressive child gains confidence in exercising leadership.

The following incident is a concrete example: Tom, the personifica-

Notebooks and papers are brought forth from special shelves beneath the committee tables, which have a seat in the recessed part for the chairman.

The practice of having small groups work together encourages a free expression of ideas and develops self-confidence and incentive to research.

tion of self-consciousness, noticed an unoccupied committee table. He continued to observe this with increasing interest. Timidly, he glanced about the room to determine whether or not he was being watched. He decided not. Cautiously, he made his way to the table and slid quietly into the position of chairman. Pulling himself into a dignified posture he glanced nonchalantly about the room. A short time after this, a group was formed and Tom, as leader, realized the joy derived from his new position.

The bookshelves, an interesting feature of the table, contain books relating to the subject that is being studied at the time by the committee. Each member has the responsibility of selecting books from the library. These he may keep until such time as a change is desirable. The fact that the pupil himself has made the selection adds to the value and interest.

In the drawer beneath the bookshelves are the committee supplies including paper, crayons and scissors. The responsibility for providing the group with the necessary supplies usually is assumed by the person on the right of the chairman.

Below the drawer an intriguing door swings open and discloses a series of interesting shelves filled with notebooks and papers. Since everyone likes to feel that there is some place of his own, individual drawers are provided in which the child keeps those little personal belongings that are so important.

Let us hear what the children have to say. A visitor, in order to obtain the reaction of the class concerning the committee tables remarked, "Personally, I can't see that these tables are any better than ordinary library tables."

The members of the class looked at one another with mingled expressions of pity and disgust, and then the defense began.

"Well, can't you see? Why, we are like families — and — well (taking a deep breath) I'm sort-a-like the father."

"Just sit in this place," said a second chairman; "then you can feel it."

"Another t h i n g," volunteered Mike, whose most difficult subject was cooperation, "maybe when we grow up and have a job we may have to work right next to some guy we don't like. This way we get used to it."

"Did you n o t i c e these bookshelves?" asked Marianne. "Our group has eleven books from the library which give us information about our subject. You see we keep them right here in our own bookcases. It is very convenient."

"I brought this book from home," volunteered Joe, holding up volume 8 of an encyclopedia. "We have ten of these at home. Shucks, we have had them for a long time but I never knew they were any good!"

"I like these little shelves where we keep our notebooks, and in this drawer we keep the supplies for the group. I guess you might call me the custodian of supplies," said Alice.

During this discussion an unusually timid little girl tried several times to gather courage to speak. Finally she said, "I am not sure whether or not I can explain, but it is this way. We talk things over in our small groups and I'm not afraid to say things because Ruth always smiles and Jane nods her head and after I have said it to them it isn't nearly so hard to tell the whole class."

The visitor smilingly agreed that the committee tables did have certain advantages.

Shortly after the tables had been installed, considerable initiative was evidenced; waste baskets of various construction and design popped up like mushrooms. Small g l o b e s seemed to spring up from nowhere. Vases of flowers appeared where the girls were in the majority. Filing cases were installed by certain business-minded groups. Three portable typewriters appeared and the click of keys added to the businesslike atmosphere of the room.

And so we say, this classroom is a place of business with the atmosphere of a home. It is a laboratory in which boys and girls are experimenting with ideas. It is a workshop in which character is being developed. Equipment is important. In this classroom it was a table of interesting design that played the host to an unusual atmosphere of learning and character development.

Religious Public Schools

FRANCIS J. DONOHUE

RECENT discussions of the legality and the advisability of public support for nonpublic, especially denominational, schools frequently have failed to take into account two lines of evidence that seem essential to an adequate understanding of the problems involved.

The first of these is that the present day nonreligious public school is a development of the last hundred years only, the result of compromise among the various religious denominations rather than of public policy against religious education. The second is that the denominational public school never has been completely displaced in this country and that even today a fairly large number of such schools are operating to the mutual satisfaction of educational and of religious authorities, and of the voters of the school districts.

The foundation of the public school systems of the United States is to be found in the Massachusetts law of 1642, which required that children be taught "to read and understand the principles of religion," and in the "Olde Deluder" Law of 1647, the specific purpose of which was education for the preservation and transmission of the Calvinistic interpretation of the Scriptures. The schools established in Colonial New England under these and subsequent statutes were usually placed by law under the supervision of the local clergy.

The close association in the public mind of religion and the civil state and the almost universal attitude that education was an expression of a state policy for the furtherance of religion were a natural outgrowth of the theocratic government which prevailed in almost all of the early English colonies.

The various state constitutions adopted during and immediately after the Revolution accomplished little change in this situation. Indeed, the constitutions of Massachusetts (1779-80) and of New Hampshire (1792) specifically provided for "the support of public protestant teachers."

The four states (Pennsylvania, Delaware, Maryland and Virginia) in which religion and religious education were dissociated from the civil government by the original state constitutions all were among the group in which school education had been regarded largely as a privilege of the upper classes. In New England, where the beginnings of a system of common schools had been made, the schools remained as before, religious and Protestant in character.

Education in the Middle Atlantic States had been traditionally on a parochial basis, and the frequent appropriations made by state legislatures in the first quarter of the nineteenth century for the support of denominational schools indicate that such support was certainly not then inconsistent with public policy.

In New York City in 1822, to take but one instance, the funds available from public sources for the support of elementary education were being distributed among schools maintained by twenty different organizations, thirteen of which were incorporated as denominational religious societies. At least three of the remaining societies, while not incorporated specifically for religious purposes, were definitely denominational in character, and taught denominational doctrines and religious practices in their various schools.

Nine religious denominations were represented among these tax-supported schools of New York City in 1822. The abandonment of this system was due chiefly to the industry and the political influence of the New York Public School Society, which succeeded in obtaining control of practically all the public educational funds allocated to the city.

The concept of nonsectarianism in New England public education did not appear until the nineteenth century revolt of the Unitarians against Calvinistic dogma. Until this time, and in many sections of New England almost until the middle of the nineteenth century, the teaching of the Calvinistic doctrines of Congregationalism in the district schools had been accepted without protest.

Horace Mann, the legislator-educator to whom is due so much of the credit for the educational revival of the 1840's, was a leader in Unitarian thought. That he was opposed not to the teaching of religion in the schools but to the teaching of the tenets of one denomination to children of other denominations is clear from the whole course of his policy as secretary of the Massachusetts State Board of Education and from explicit statements he made.

The Massachusetts law of 1837, in the drafting of which Mann undoubtedly played no small part, permitted the public schools to teach "the principles of piety and morality common to all sects of Christians." Since Unitarianism had arisen out of a denial of certain fundamental tenets of Calvinism, it contained no

Educators who "view with alarm" that section of the report of the President's Advisory Committee on Education relating to public support of denominational schools will find food for thought in this survey of American religious public education, which is written by an education instructor, University of Detroit

positive dogma to which the Congregationalists could object. Thus it was possible, under the religious conditions existing in New England in 1837, to teach Unitarianism in the common schools of Massachusetts under the guise of nonsectarian religion.

The opposition of the leaders of the Congregationalists to the enforcement of the new law may well have been based upon the suspicion that Mann's new nonsectarian religion was, in truth and fact, not nonsectarian but Unitarian. Conceding the justice of the principle of religious liberty in the schools, many Congregationalists continued to assert that denominational instruction should be given if this could be done without violating the freedom of conscience.

"If there should be districts, as probably there would be a few, in which the members of different religious denominations, not satisfied with the teaching of the common Christianity, should insist on the teaching of their respective doctrines, even let it be so. Let each scholar read or study his own Bible and his own catechism. The pupils might, if it should be thought most convenient and wise, when the time for religious instruction arrived, be classified for this purpose."*

Religious Teaching Excluded

The secularization of public education, following Horace Mann's general principle of the exclusion of any doctrine to which objection might be raised, soon proceeded far beyond his expectations. The Catholic Irish, not sufficiently strong as a political group to force widespread public support for their parochial schools, soon were able to obtain the exclusion from the public school curriculum of many teachings which Mann, contemplating only the Congregationalist-Unitarian controversy of his own day, had considered to be "principles of piety and morality common to all sects of Christians."

Other denominations have objected, usually with success, to various devotional practices in the public schools. The Jews have objected to the teaching of the New Testament in either the King James or the Douay version, and today the Freethinkers are making determined efforts to exclude from the public schools all mention of a Diety.

The outcome of the application of the policy of excluding each doctrine or devotional practice to which objection is made on the ground of sectarianism has been, as might well be expected in a country so heterogeneous in racial backgrounds and religious beliefs, the almost total disappearance of religion from the public school systems.

Public support of denominational schools by local school districts has, however, continued in a fairly large number of isolated instances, usually in localities in which all or nearly all the voters are of the same religious affiliation.

Neither Horace Mann's principle of excluding doctrines objected to as sectarian nor the policy of direct democratic control over education by the citizens forbids the teaching of the religious doctrines or practices adhered to by substantially all patrons of the local school.

In any situation in which the voters of a school district so firmly believe in the necessity of religious education as to be willing to maintain a parochial or other denominational school and to send their children to that school in such numbers that the public school of the district is virtually abandoned, it would be a violation of the fundamental American principle of democratic control of education by the citizens of the school district to require the maintenance of the nonsectarian public school. It need not be pointed out that such needless and pointless duplication of school facilities would be economically wasteful as well.

A survey* during the spring of 1937 revealed at least 340 situations in which public school boards were applying the general principle enunciated above to the satisfaction of the patrons of the school district or county, and usually with at least the tacit approval of the state education department. Although this survey was specifically restricted to Roman Catholic schools, a number of schools which are denominationally Protestant also were found.

159 Cooperative Arrangements

A detailed study of the arrangements existing in 159 of these situations (one of which has been in existence since 1834) indicated that the cooperative arrangements between church and public educational authorities, involving the maintenance of what might be called denominational public schools, generally have resulted in an increase rather than a diminution in the extent of public control over the schools.

The information on administrative practices which was furnished by local correspondents, including school board members, superintendents, principals, teachers and clergymen, indicated that state and county prescriptions in such matters as curriculum, textbooks and teacher qualification and certification are being rigidly enforced. In most of the cases, a considerable improvement either in instructional efficiency or in the local public attitude toward the school, or in both, also was reported.

Such arrangements are, of course, dependent upon the wholehearted cooperation of the public school authorities and the local pastor or church board. Should they prove unsatisfactory to either party, they can be terminated immediately, and their termination will be required by state educational authorities if the instruction in secular subjects is found inferior.

No claim is made that the type of arrangement described above would be practicable, or even desirable, in every situation. It is recognized that many denominations would not consider it necessary to establish separate schools for their own members, and that even within the Roman Catholic and the Lutheran denominations (which seem to have been the most active in promoting religious public education) there is a wide variety of opinion as to the comparative advantages of public support and of the greater freedom from state control that is characteristic of schools not receiving public support.

*The New Englander, April, 1848; quoted in *Report of the [U.S.] Commissioner of Education,* 1894-95, pp. 1639-40.

*For a preliminary report of the findings of this survey, cf. Cronin, James T., and Donohue, Francis J., Catholic Public Schools in the United States, Institute of Catholic Educational Research, Fordham University, Bulletin 1937, No. 1. This report was also summarized in School and Society **45:** 756-8 (May 29) 1937.

Real Issues for the P.-T.A.

ELMER SCOTT HOLBECK

WHEN you last attended a parent-teacher association meeting, did you come away feeling that here was a small interesting group, greatly "overfeminized," trying to do something for the school and children? Did you feel that this persevering and conscientious band of patrons floundered as to its real responsibility in the whole educational process? Did you carry away a sneaking suspicion that, in spite of an earnestness on the part of the parent-teacher association members, they were not discussing matters fundamental to the school or to the education of the child?

I had that experience twenty years ago. I felt the same way a year ago. And the sad part of the whole thing is that I have always been friendly to the parent-teacher association. I want this group to do well the job of helping the school make better provisions for growing boys and girls.

Much has been said about the parent-teacher association working for better child performance. Heaven knows the schools need the help of such an agency! But after years of work with the parent-teacher association and other groups of patrons, during which time I have visited and addressed hundreds of such organizations, made studies, conducted tests and researches into the activities and programs of the P.-T.A., I am convinced that this amazing organization of nearly two million members is not getting all it should out of its organization.

There are several reasons for this. My studies reveal some of them.

1. The early expansion of program and activities outside of its primary purpose of child study led to a confusion of interests.

2. The lack of support and understanding on the part of educators caused jealousy and friction.

3. The association's purposes were not clearly defined and understood by its members.

4. Faulty articulation with community and school caused a lack of interest and support.

5. Failure of the local parent-teacher program to meet vital needs of the community weakened its case for child welfare.

6. The purposes of the association were not interpreted to patrons and to the community.

In spite of these weaknesses this amazing organization has grown to be the largest in the country. In the face of opposition, criticism, lack of support on the part of homes and citizens, this is a remarkable achievement.

Critics in the various communities who felt that the parent-teacher association was only a meddlesome fault-finding group organized to solve a special problem or to obtain some special gain had their supporters. In justice to the parent-teacher association, however, this aspect has been exaggerated and today there are few associations that are critical and belligerent toward school practice and procedure.

There is no basis for minimizing the work of the parent-teacher association in developing health, safety, adult education and equipment programs. Its support of salaries and a decent living wage, in the face of strong opposition, is heartening to teachers. Moreover, it has supported an intelligent and progressive educational program.

The need of an organization such as the parent-teacher association to assist in carrying forward an educational program in a democracy is great. Then, if the P.-T.A. wishes to gain a place of permanent importance in a democracy, it must support the real issues of education and essential things involved in child training and development.

For many years the author, director of junior high schools at Passaic, N. J., has been working with the parent-teacher groups

A few issues that might be called to the association's attention are: (1) democracy itself; (2) the value of education in a democracy; (3) school support and salaries; (4) what and how to teach in the schools; (5) relationships of schools and community to local boards of education; (6) planned programs for the association; (7) the educator's work with the association and his responsibility; (8) leadership, and (9) educational function, the part that the association should play in the whole educational process.

Parent organization will never succeed unless patrons and educators, too, are willing to discuss the fundamental factors involved in the training of a child. Topics such as marks, report cards, equipment, attendance, merit badges, scholarships, contests, social functions, special day observances, drives and shows have taken too much time away from the more important phases of parent-teacher association work.

The whole program of the parent-teacher association in a community must be interesting. It must offer something to the parents of children. In a sense, the work must be alive and dramatic. The program must deal with realities beginning in the very district of the local organization. The first step of the parent-teacher association is to discover its immediate problems and attack them intelligently and courageously. The whole procedure cannot be completed with an effective publicity program.

It is time to find out where the association stands. It must separate itself from the fringes of unreality and deal with reality and with the real and vital life problems found in every community. Jointly, with the school, it must see and deal with the whole community.

Bringing

SOME guidance programs, like Topsy, "jes' growed," and are as a result just about as uncoordinated as the beloved little darkey; some have been achieved overnight because of community or prestige pressure and are more theoretical than practical; others have grown and evolved with the school, started to fill a need and planned carefully by those in charge; hence, they fit the system. The Santa Barbara plan belongs to the final group.

No official titles were used until two years ago when, because of the growth of the school and because of the development of a general guidance setup throughout the whole system, some nomenclature seemed advisable. Even at that, the change involved only two new workers, a counselor for sophomore boys and one for sophomore girls.

What then is the present setup? The two counselors have general supervision of the tenth year program. The registrar is in charge of guidance for college and is chairman of homerooms; the senior homeroom chairman is senior counselor. The boys' vice principal, the dean of girls and the principal are available for any problems that seem to be their particular province and for personal problems that pupils care to take to them. Heads of departments are ready at all times to talk about problems that concern their own fields and the commercial and the vocational heads in particular do a large amount of this work.

On entering high school the sophomores are divided into five groups, alphabetically, boys and girls in separate groups, for orientation work in five major fields, namely, general orientation to school and to life, social hygiene, social usage, the use of the library and vocations (for boys only at the present time).

These groups meet for periods of five weeks (half a quarter) for twenty-five minute periods twice a week only, each group moving on to a new teacher at the expiration of this period. In this way each sophomore contacts all the groups during the year. In addition to this the two counselors are used for clinical studies when these seem necessary.

Between them the counselors also see every tenth year pupil for individual conferences on his own affairs at least twice during the year. This is difficult since counselors have only half-time assigned for counseling at present.

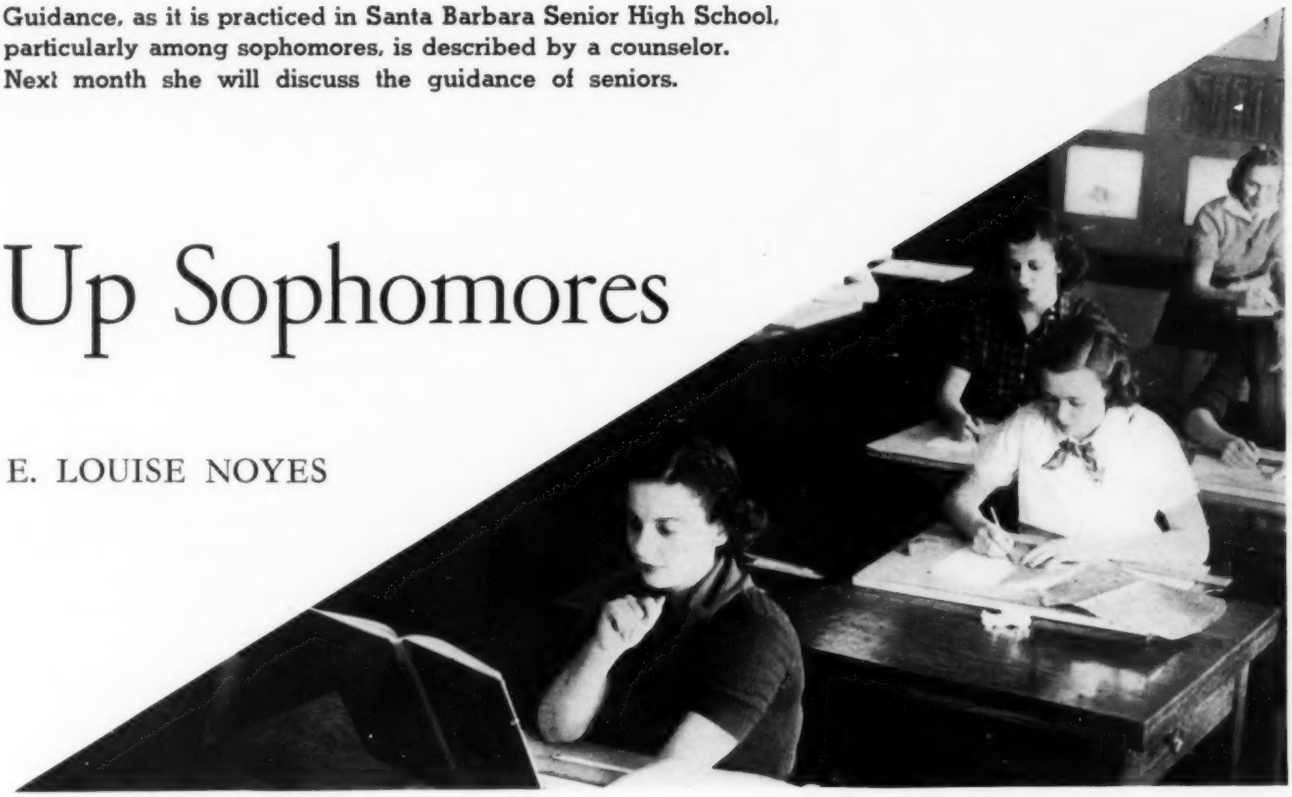
The registrar works largely with pupils who are planning to attend colleges that demand particular subjects for entrance. Efforts are made to reach, as early as possible in their secondary school career, all those who plan to enter any of the highly technical schools, so that no pupil may fail to enter because of a poorly planned high school program. All 12B seniors are given a check sheet at the first of that semester, so that each one may check with his homeroom teacher and know that his way is clear for graduation, for the college that he means to enter or for work that he wishes to take up. Per-

Group guidance is carried on twice each week, sophomores being divided into five groups. Homeroom teachers are urged to follow up the work that is done in the larger groups which meet twice a week.

Guidance, as it is practiced in Santa Barbara Senior High School, particularly among sophomores, is described by a counselor. Next month she will discuss the guidance of seniors.

Up Sophomores

E. LOUISE NOYES



sonality inventories, I.Q.s, hobby sheets, all come with each pupil from the two junior high schools and these are a part of the records in the counselors' office. All these make counseling easier.

The tenth year guidance is the largest part of the school's work in group guidance, though many homeroom teachers do some work along that line and the seniors have some definitely planned work of the sort. This group guidance does not take the place of the homeroom work, as it comes on Monday and Thursday, while the homerooms meet at the same time on Tuesday and either Wednesday or Friday, the other day being taken up with an assembly. Teachers are urged to follow up in the homerooms the work that is done in the larger groups.

The general orientation to school and life is handled by the principal and the dean of girls, who thus become acquainted with all first year pupils, thereby helping all pupils to feel that the heads of the school are their friends and not just someone who sends for them when they have infringed on some ruling or are otherwise in trouble. This attitude has been an exceedingly helpful by-product of these groups.

In his work with the boys the principal makes three main points: Why are you in school? What will people be expecting of you when you leave school? What is true honesty?

The first question, meant to startle the boys, usually succeeds. Frequently pupils do their first serious thinking as to why they really are where they are when they have this asked them. Naturally this is followed by considering what their plans should be for their last three years of public education. The breadth of the question gives room for consideration not only of scholastic plans but also of plans for participation in pupil activities and for a discussion of what leadership means, what qualities one must have and what price one must pay in order to be a good leader. Through these talks the pupils are led to do some independent planning for their high school years and to view them as a complete unit, not as a matter of several little watertight compartments.

What will people be expecting of you when you leave school? Here is a challenge flung straight into the faces of these tenth year pupils. College is a problem for an increasingly large number of them; employment is a problem that faces all eventually. Both this question and the final one start many a boy and girl to thinking of the future.

The dean of girls works with the girls on citizenship problems, centering her work around the high school curriculum and what it offers; requirements for graduation from high school and requirements for entrance to college; the so-called extracurricular offerings, such as the scholarship society and the other clubs in the high school, both social and service type; the need for respect for the physical plant of the high school, and school traditions and customs.

These discussions help the girls to see what the high school has to offer each one in activities and to realize that each can find some special place to work in which her own peculiar talents may find an outlet.

Tied in closely with the dean of girls' work is the Big Sister plan, by which each incoming sophomore girl is given a sponsor from the upper classes, preferably a senior, a girl who will be friend and adviser to her until she feels able to stand on her own.

Much of the hardship for the girls coming into a huge school, more than twice as big as the schools they have been accustomed to, is thus ob-

viated at the start and many happy friendships are the result.

In addition to these definite pieces of orientation, the attendance secretary has one period with each of the groups in the course of the year, as early as possible, when she explains the necessary office rules and regulations with regard to attendance.

The librarian gives instruction in the use of the library so that the sophomores may understand that the library is a laboratory, but a most friendly one, to which they are welcome at any time. Her chief effort is to make all pupils feel at ease in the library, to be able to use it as an efficient tool and helper and to regard it as a place of first, not last, resort. This work is then followed up in all the English classes, so that before the year is over sophomores can feel superior about their knowledge of the library.

The work in social hygiene, done on a simple plan, is handled frankly and honestly and forms a good basis for the excellent work done in this subject by the principal and by the dean of girls in the senior year. Family prejudice, religious background, personal shyness, all these are factors to be considered. It is possible in spite of this to do tactful and sincere work.

The work for the boys takes up the reproduction of various types of plants and animals and touches on the problem of heredity, particularly on the value of a good heredity. It then takes up the sex hygiene problems that boys in their early teens must face, stressing honesty of thought and action and also the bearing of the adolescent years on the boy's future happiness in his own home.

The girls begin with general health habits, particularly as they have to do with charm and physical beauty. The girls discuss such topics as posture, the care and physiology of the feet, the care of the teeth, good body actions, vitality and personal attractiveness. From these they go to the vital question of the origin of life.

The reproductive system is introduced as merely one of the various systems of the body. In this way the approach is made naturally and unaffectedly. The path is open for a discussion of the reproduction of plants and of the lower animals and then that of mammals. Anatomy of the generative organs and the physiology of reproduction are both considered.

For the vocational groups the employment service of the high school and the preparation for employment offered by the high school are stressed. Employment trends and government agencies for helping persons get into industry are discussed at some length.

The procedures covering the obtaining of work permits and the laws governing the employment of minors are discussed so that no boy can fail through ignorance to do the right thing with regard to these vital matters.

As the high school has an effective department for pre-employment trade training and cooperative training, these are presented to all the boys in some detail. Attention is also called to the vocational opportunities given by the other departments of the high school.

This unit of work ends by emphasizing the fact that the whole trend of the country is toward more training for success in the better occupations and that it is now possible for almost any boy to get the necessary training if he is willing to do some long-time planning and to sacrifice some of his immediate pleasures.

This optimistic note, not a "pollyannaish" one, is particularly good to end on during these days when altogether too many people are trying to make the boys believe that further training is unobtainable and futile.

For the two teachers who have the groups in social usage, the work is both difficult and easy; difficult because tenth year youngsters are beginning to be shy about talking about their problems even in their own groups; easy because pupils are tremendously interested in knowing what it's all about in the social world.

Good manners and good taste in all the ordinary situations of sophomore life, at home, at school and in public, are considered. Table etiquette, dance floor procedure, telephone courtesy, introducing the "girl friend" to the "boy friend," to the "folks," or to other grown-ups, all these are included in the course.

Through the help given in all these groups the sophomore pupil will be acclimated to the school as a whole by the end of the year. He also will become acquainted with at least five teachers, frequently ones whom he might not otherwise know during his sophomore year. Santa Barbara high school administrators feel that through this guidance work the sophomores actually do become better members of the high school community and, therefore, better citizens of the real community.

Better Social Adjustment Sought

THE Rufus King High School of Milwaukee is using the homerooms and a system of 13 councils in a planned attempt to bring about better social and emotional adjustment among its 2000 pupils.

These councils each consist of one representative from each of the 53 homerooms. They meet weekly and work with problems within the school and with problems that relate to school and community relationships.

The plan is based on the principle that every individual must have the opportunity of tasting success in one shape or another and that no individual can remain socially secure and mentally healthy when continually failing.

The work of these councils and homerooms has been to bring about better social and emotional adjustment and to develop a feeling of confidence and worthwhileness among many of the pupils who have been found wanting in these qualities.

In many cases, according to R. G. Chamberlin, the principal, the school has been able through these organizations to build up better attitudes in these young people and to start them on the way to success in their work with a much happier school adjustment.

Cooperative Practice School

M. M. CHAMBERS

MANY institutions for the education of teachers have too few contacts with the local public schools. Often the schools of a city or village in which a teacher education institution is located are not available for practice teaching.[1] Teachers' colleges often provide themselves with practice teaching facilities in a variety of ways, but the possibilities inherent in cooperation with the adjacent school district must continue to be interesting. For this reason a 1938 decision of the supreme court of New Mexico is worthy of notice.

In brief, the court saw no legal stumbling-stone in the path of a plan whereby the school district of Silver City and the New Mexico State Normal School will cooperate to build and operate a high school to their mutual advantage. The arrangement is authorized by a statute of 1937 which empowers any school district having within its borders a state school maintaining a high school to vote and to issue bonds to provide a high school plant which will be used by the state institution as a practice school.

The statute provides that the proceeds of the sale of the bonds shall be turned over to the governing board of the state institution, to be used only for the purposes for which the bonds were voted and to be expended therefor only with the approval of the governing body of the school district. Title to the building and site and management of the high school are to be vested in the governing board of the state institution. In return, it must accept all qualified high school pupils residing in the school district. If at any time the state institution ceases to conduct a high school, thereupon the building, site and furnishings must be conveyed to the school district.

[1]Zook, George F.: Tomorrow's Teachers, The NATION'S SCHOOLS **21**:33 (March) 1938.

A third party, the county board of education, also is involved. It must pay toward the operating expenses of the high school a sum not to exceed $90 per year per pupil for every pupil who is a resident of the county. The high school is to receive its proportionate share of the county distributive school fund.

The only direct charge upon the local school district is to be for interest on and sinking funds for the retirement of the bonds. Any other district in the county having pupils in attendance at the high school must pay to the local district an amount for each such pupil, so that the direct charge for each year shall be borne equally for each pupil by the district of his residence.

Legality of joint operation of a practice school by a state teacher training institution and the adjacent school district has been upheld by the New Mexico supreme court

Some time after an election had been duly held and carried in the Silver City school district, a taxpayer sued to enjoin the issuance of the bonds, naming several grounds in his petition, three of which will be discussed here.

When eventually the case reached the state supreme court, that body pointed out that the petition could not be granted because it had not been filed originally within the limited time after the election which the statutes allow and was therefore barred. But, evidently recognizing the importance of the issues, the court nevertheless delivered a lengthy opinion taking up the grounds of the complaint one by one.[2]

A section of the constitution of New Mexico provides: "Neither the state nor any county, school district or municipality . . . shall directly or indirectly lend or pledge its credit, or make any donation to or in aid of any person, association or public or private corporation. . . ." The cooperative plan is not in conflict with this section, because the transaction between the school district and the state institution is neither a gift nor a "pledge of credit." Instead, it is a fair exchange for value received. No pupil residing in the district is to be denied admission to the high school and the district will be relieved of numerous direct charges that it would ordinarily have to bear in connection with a school building, such as insurance, repairs, replacement of equipment and improvement of grounds. Said the court: "It will get value received for every dollar put into the enterprise."

Another clause in the constitution stipulates that: "No school district shall borrow money except for the purpose of erecting and furnishing school buildings or purchasing school grounds." This does not necessarily mean that a school district must invariably hold title to such buildings and grounds. In fact, no school district owns any of its property in the same sense as a private owner; instead it stands in the position of trustee and the ultimate ownership of the school property resides in the state.

On this point the court said: "Of course, the broad purpose of acquisition and ownership by the district is to assure housing and facilities for conducting the free public schools of the state. As to pupils of high school age in defendant school district, that purpose is fully served by the arrangement disclosed. While title to the building and land is vested in the

[2]White *v.* Board of Education of Silver City (N. M.) 75 P. (2d) 712 (1938).

state school . . . the school district shares with it the full equitable ownership." This conclusion is reenforced by the reconveyance clause in the statute authorizing the arrangement.

A third unsuccessful contention was that the plan involves taxing the people of the school district for the benefit of the state institution and, therefore, violates the constitutional requirement of equality and uniformity of taxation. Here again the language of the court is plain: "We do not consider that the proposed high school is largely for the benefit of the state school or that benefit to Silver City school district is a minor part of the project. A reading of the statute and consideration of the benefits obtaining in favor of the school district strongly persuade us to the contrary. These special benefits, as well as others incident to the plan, accruing to the taxpayers of defendant school district, equalize and render uniform the tax as between taxpayers of such district and others throughout the county." All the judges concurred in this opinion.

This decision indicates that the court possessed an awareness of the advantages to be derived from cooperation between the state institutions for the education of teachers and the local school districts, and that it was willing to go on record at considerable length to explain that the plan provided for in the statute of 1937 was in conformity with the constitution and could not be obstructed on the grounds presented in the case under review.

The apparent success of the plan in avoiding legal pitfalls may lead to the enactment of similar statutes in other states and the reasoning of the New Mexico supreme court may become a useful precedent tending to establish the legality of similar plans elsewhere.

Educators have long known of the desirability of cooperative plans of this kind, but there have been times and places when they were faced with insuperable legal barriers. For example, in 1907 the state of Washington authorized each of the state normal schools to establish a model training school to be attended by suitable pupils from the public school district in which the normal school was located. It also directed the state superintendent of public instruction to apportion funds from the state common school fund to such training schools, in amounts bearing the same relation to the total of such funds apportioned to the local public school district as the number of pupils enrolled in the training school bore to the number enrolled in the local public schools.

An injunction preventing this apportionment was granted by the state supreme court on the authority of the constitutional provision that "the entire revenue derived from the common school fund and the state tax for common schools shall be exclusively applied to the support of the common schools."[3]

That decision of a generation ago was in harmony with still earlier cases in New York and Virginia, holding that no appropriations out of the state common school fund could be made to the state normal schools.[4]

[3]School District No. 20, Spokane County *v.* Bryan, 51 Wash. 498, 99 P. 28, 20 L.R.A.N.S. 1033 (1909).

[4]Gordon *v.* Cornes et al., 47 N. Y. 608 (1872); State Female Normal School *v.* The Auditors, 79 Va. 233 (1884).

However, both the New York and the Virginia cases involved attempted appropriations to establish normal schools and did not specifically contemplate the support of accessory training schools to be attended by public school pupils. It is therefore doubtful that they offer any support to the reasoning of the Washington court.

It is especially noteworthy that the New Mexico court did not disapprove the payment of a proportionate share of the county distributive school fund to the state normal school for the maintenance of the proposed high school to be attended by pupils residing in the county.

There would seem to be no conclusive reason why such a school should not be regarded as a common school within the meaning of the state constitutions, entitled to receive its share of the state distributive school funds the same as any other common school. The New Mexico decision is a step toward the establishment of this point of view, which may mean much for the future of teacher education in this country.

Visual Aids in Teaching Physics

O. S. ANDERSON

THE value and use of visual aids in a school depend on the following: (1) resourcefulness of the teacher; (2) knowledge of the use of visual aids; (3) systematic planning of each semester's work; (4) knowledge of the contents of visual aids to be used; (5) the classroom setup, and (6) the application of the contents of visual instruction to the subject matter.

A variation of method is necessary to meet the present school situation. A teacher should no longer be satisfied with a single method of presentation of all the phases of subject matter. Teacher resourcefulness is a necessary attribute to the use of visual aids.

The teacher should plan systematically to use visual instruction as a part of the course of study. A review of the text, community needs and the course of study should be made. From this information he can determine where there is need for motion, sound, size, distance, time lapse, review, motivation or a combination of these.

The various pictures available for use in physics have been found to have a variation in value as to how they are employed in a unit of work. Some are more effective for motivation; others for review; others for the various results one expects to attain in the use of visual aids.

Studies of the electron, electrolysis, power plant, metric system of measurement and engines are examples of parts of units in physics that have been found to be greatly benefited by the use of visual aids.

The work has just begun and we are on the threshold of better and quicker methods of teaching. Teachers should be encouraged to make wider use of visual aids in classes.

Finding Time for Science

LOFTON V. BURGE

Pupils in a one teacher school are performing an experiment with apparatus of their own improvisation. Their keen interest is obvious.

IN NO teaching situation is there greater need or a more opportune place for elementary science than in the rural school. Yet relatively little has been accomplished toward carrying out a planned science program for the rural situation.

An inquiry from a large number of rural teachers in northern New York attributed retardation of the science program to the following difficulties: (1) lack of time for adapting science to the already overcrowded curriculum of the school of several grades; (2) lack of textbooks and equipment suggested for experimentation; (3) feeling on the part of the teacher of inadequate training for effective science teaching.

The question of teacher time is doubtlessly the most serious problem with which the rural teacher is confronted. An examination of the rural schedule shows that the average teacher is "hearing" classes continuously throughout the school day. Obviously, finding time for science becomes a major problem.

A minimum of ninety minutes per week is necessary for the demonstrations, experiments and the development of scientific principles in a successful science program. Since these minutes cannot be added to the day's work, provision for the science work must result from a more economical use of the school day both in the organization of classes and in more effective teaching procedures.

The daily teaching schedule of the teacher of six to eight grades should have a maximum of no more than sixteen classes. Since the lower grade children do not have the ability to work independently, short frequent class periods are essential for them. On the other hand, the upper grades would probably show more progress from fewer but longer periods per week in a particular subject than from the short daily recitation. During the longer period the teacher would not only have an opportunity for developing the facts and principles that are peculiar to the subject at hand, but she would also have time for relating these facts and principles to other subjects. The longer class period also gives the teacher more time for motivating the new work and for making more specific assignments from which more efficient independent study may result.

The average rural teacher has a tendency to teach each subject independently of other subjects. The result of such procedure is an attempt to cover too much material rather than to teach a few principles well. Careful planning of the work for each subject over a long period of time enables the teacher to emphasize and interrelate facts and principles common to more than one field, as well as to eliminate much.

There are principles of science that should be developed during the period allocated to science, but the teacher who uses these principles in teaching other subjects utilizes interest derived through association. For example, many of the desired rudiments in both oral and written language may be developed adequately through science. An interrelation of these subjects is not only a timesaving element in the teacher's program but also affords more meaningful material for the child in oral and written English.

The one room organization of the rural school lends itself particularly well to individualization of instruction in the tool subjects, both as a timesaving element and as an efficient teaching method. For instance, many rural teachers give too much of their teaching day to arithmetic by conducting a formal recitation for each grade even though there are only two or three children in a group. If the entire school works upon arithmetic during the time allotted to this subject, the teacher may use her time in developing new proc-

esses; making clear assignments based upon the needs of the individual children, and helping the ones who are having difficulty.

The teacher who organizes her program for successful teaching and for effective learning on the part of the children will find sufficient time to give a minimum of two forty-five minute periods each week to the teaching of science. The principle of the differentiated assignment may be applied to this subject to the extent that the entire school may be taught as one group.

The science unit should be planned so that a part of it may draw upon the experiences of the lower grade children and may be within their comprehensive range. Other phases of the work should be presented primarily for the upper grade level. By such a presentation, the teacher may not only provide for the lower grade children but she will supply materials that are within the comprehensive range of the retarded child of the upper grades.

After the subject matter has been introduced and the work has become too difficult for the lower grades, the younger children may be given some of the science equipment to play with or may be permitted to spend the time in their library corner. In the initial work in science, young children should not be expected to master much factual material, but from the experiments and the discussions of the older pupils they may form scientific attitudes that may be developed further as they progress through the grades.

The textbooks available for science are written for the most part from the urban point of view. There is no single text that the rural teacher can follow from week to week. However, the absence of a specific text may be considered an asset to the science program. The use of one textbook has a tendency to stress factual material foreign to the child's experience and interest. The teacher must obtain from a variety of sources the materials best suited to the development of scientific attitudes through the utilization of her pupils' environment.

There are several texts in elementary science that serve adequately for specific references, as well as a great number of books offering rich material for independent reading on particular subjects.

When the subject matter is over the heads of the smaller pupils, they go off to their library corner to read. The books used are not labeled as to grade level and this benefits the retarded.

Probably one of the most desired outcomes of elementary science is that of stimulating children to read for knowledge and pleasure. A sixth grade child with fourth grade reading ability will be reluctant to read the book adopted in the fourth grade, but if several books are used and not labeled as to grade level, the retarded child will read books that he comprehends and enjoys.

Experimentation is essential for a successful science program. At no time during the science period is the children's interest as high as during the performance of the experiment. Available science textbooks suggest equipment for experimentation beyond the means of the average rural school. The resourceful teacher who plans a science program with the season in mind has a vast laboratory at her disposal and little need for more equipment than that which she and her pupils can collect. Expensive apparatus is not essential for explaining many aspects of science to a group of curious children.

Since the natural environment of the rural school furnishes such an abundance of material in the spring and autumn, these seasons should be devoted to the biologic sciences. Few of the school buildings have heating facilities adequate for keeping growing plants and aquariums during winter months. Therefore, experiments in physical science involving temperature changes are best suited to this time of the year. In the treatment of such topics as air, water, heat and light, the children are easily motivated for the study of the effect of these factors upon such topics as seed germination and plant growth. Thus, meaning and continuity are given to the science program for spring. Electricity and magnetism and the simple principles of astronomy may be studied at any time of the year.

The teacher who has followed a formal type of program for a number of years and whose teaching methods are based largely upon the drill of isolated facts is hesitant about entering upon science teaching. The informal teacher who is alert to child interests and who knows how to work with children finds little difficulty in incorporating science into her program. With relatively little guidance this type of teacher can motivate a unit of subject matter and direct her pupils to source material for reading. From a discussion of these materials the children raise questions that may be answered through simple experiments that stimulate further study.

Subject matter training in any field is, of course, an important phase of teacher preparation. It is equally important that the teacher develop a teaching technic that enables her to work with children at their level and to utilize the experience and interests of her pupils. The teacher who has acquired these technics and has developed the philosophy that science has a place in the elementary curriculum can gain through in-service training and through her own study of easy materials sufficient knowledge of science to teach effectively.

Auditing Services

Where the Line Should Be Drawn

EDGAR L. MORPHET

THERE are some definite policy controls which are closely related to auditing service but which should be considered specifically educational rather than auditing functions. This group of policy controls, however, unless fully defined and delimited, may cause much difficulty and misunderstanding. While it is important to recognize that auditing control may mean policy control unless functions are carefully defined and proper safeguards are provided, it is just as important to recognize that functions can be defined and safeguards can be provided so that the desirable auditing services are differentiated from undesirable policy controls.

The auditing service is commonly invested by law with the responsibility for determining whether or not the public is receiving the benefit from government expenditures. However, there are other government agencies charged with similar and closely related responsibilities. The laws of every state, for example, place major responsibilities upon boards and superintendents of education for determining the services needed by the schools and for expending public funds accordingly. Thus, the responsibility for formulating policies and for exercising policy controls is distinctly an educational and not an auditing function. Funds cannot be fully and properly accounted for and financial transactions adequately safeguarded unless proper policy controls are exercised.

Some of the major policy controls which are needed but which constitute an educational rather than an auditing service and which may become dangerous without proper safeguards follow.

One of the problems in public school administration that has caused much difficulty in a number of states involves the services and functions for which public school funds may be expended.

Frequently the laws have been vague and often conflicting. If some of the laws give auditors the responsibility for determining the purposes for which funds may be expended or if auditors assume that prerogative, there is almost certain to be difficulty. Any auditor who can determine, on his own initiative or on the initiative of his department, when a service is desirable is exercising a definite and undesirable control over educational policy and is acting in a dual capacity. Such control is not an auditing function and is a distinct violation of proper auditing practices.

School officials in Alabama, for example, have been subjected to the possibility of periodic embarrassment because of some activities of the auditing department (under the comptroller since 1933). These have not only been policy-forming in nature but have been retroactive in effect. On the strength of existing uncertainties in laws, which seem to give the county boards considerable discretion in determining purposes for which educational expenditures should be made, expenditures for such items as the salary of a secretary for a principal have been charged back as illegal.

Taking advantage of a particularly acute financial situation during the year 1935-36, the comptroller announced that he would determine the purposes for which school funds might be spent and that "in arranging the budget he would set up adequate funds to pay only the salaries of school teachers and bus drivers for the minimum term."

This position was rigidly adhered to until the educational authorities had received from the attorney general a decision that the policy-forming usurpation of the comptroller was entirely illegal. Thus ended the most spectacular attempt of the auditing department of that state to seize and hold the rôle of policy determiner for the schools.

The determination of whether value has been received for the money expended presents many difficult problems that may clearly involve educational policy. The employment of incompetent teachers is an economic waste rather than a strictly financial waste. It is clear that auditors cannot hope to determine whether teachers are efficient or inefficient, nor would such a matter be a concern of the auditors.

However, state laws apparently have sometimes imposed upon the auditors responsibilities which are almost as impossible to meet and which lead to just as serious difficulties as if they were charged with the responsibility for determining the competence of teachers.

The Iowa law, as quoted by Superintendent True in the The NATION'S SCHOOLS (July 1937) provides that: "On every examination inquiry shall be made . . . whether the cost price for material and improvement in said school is in excess of the cost price for like things in other schools of the state. . . ."

The responsibility for determining comparable cost prices for materials is one that can be properly exercised only by experts. If this function is performed by the auditing department, the department must neces-

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sarily become an authority on prices and standards for all school materials. Obviously, questions of policy might easily become involved when the auditing department attempts to carry out the mandate of this legal provision.

The proportion of school funds that should be spent for any one function or group of functions involves school policies fully as much as the determination of services for which funds should be spent or the question of whether value has been received. Mere comparison in terms of averages may be meaningless or may even become harmful. For example, a larger proportion of the current expense is needed for transportation in a sparsely populated than in a densely populated county. Only a careful study by educational experts can determine what that proportion should be.

The preparation or amending of the budget involves educational policies to such an extent that even with the broadest interpretation it cannot be considered a matter for auditors to regulate. The accounts, however, should be so set up that the auditing service can provide the proper check to determine whether or not the budget has been followed. The desirability of this service cannot be challenged, provided these functions are restricted in accordance with the suggestions made in last month's article as "desirable influences of the auditing service upon educational policy."

All auditing service exerts some influence upon the determination of some policies. However, there are a number of services in the nature of mechanical controls that are so desirable and so commonly accepted that they are recognized as coming under the legitimate scope and purposes of auditing.

A number of other controls are sometimes improperly exercised by auditors; however, they are distinctly not auditing functions because they encourage undesirable controls over educational policies. Among these are the determination of the services for which funds may be expended; the question of whether money has been most wisely and economically spent; the proportion of funds that should be expended for any service or group of services, and the services for which expenditures are to be budgeted.

Whether or not auditing uses or seeks to use undesirable controls which tend to determine educational policies depends, first of all, upon the laws of the state. The laws may encourage or require the auditors to perform functions that do not belong in the field of auditing or they may be so conflicting that auditors may be permitted to intrude upon undesirable policy-forming fields.

Almost as significant as the law is the attitude of educational authorities and of the auditing department. If educational authorities are indifferent or are handicapped in any manner and if the auditing department is political or headed by self-seeking individuals, control may be sought, regardless of the law.

The following criteria are suggested as bases for differentiating between auditing services and policy controls:

1. If the service desired is of a mechanical nature for the purpose of ascertaining the fact of fraud, misappropriation of funds or the financial history or position of a board of education, as shown by an analysis of receipts and expenditures for a given period or at a stated time, it is a function of the auditing authorities. This does not, however, imply that educational authorities should be released from the obligation to make available, from time to time, for public consumption reports of their financial transactions.

2. If the service desired is one of determining the educational policies to be followed in providing an educational offering of maximum benefit to the public, it is the function of educational authorities. This does not imply, in the least, that boards of education have the power to spend public funds capriciously, without proper accounting to the public, but rather that the decision regarding whether a given expenditure not prohibited by law is wise or unwise from an educational standpoint is a matter that should be left to educational authorities.

Field Work in Mathematics

EDWIN A. BEITO

MUCH has been said in recent years about making secondary mathematics more practical, lifelike and real, but little has been done about it. We are agreed that most of our secondary mathematics has been too theoretical, mainly drill and manipulations, and that our textbook problems have been sadly artificial and unreal.

The unfortunate result is that the value of mathematics as now taught has been seriously questioned and its study has become unpopular with a large share of the pupils in the high schools.

In recent years field work, which consists chiefly of elementary surveying, has been advocated as an adjunct in teaching mathematics partly to overcome this situation. It is recognized that a form of laboratory work in mathematics is essential and that it will do for mathematics what it has done for science.

Although mathematics is chiefly concerned with quantitative relationship, it is found that pupils know little about it. Ask any class to estimate the height of the school flag pole and you will receive answers ranging from 25 to 250 feet. Ask the pupils to estimate the size of the schoolroom and you will get another surprise.

The reason for this situation is that most of our thinking has been in unreal situations.

In recent years I have designed and constructed numerous simple surveying and astronomical instruments which can be made in the manual training departments and can be used to obtain fairly accurate data for field work. These instruments are of simple construction and can be made at small cost. The work is receiving favorable attention in many parts of the country and has prompted many inquiries.

County Transition

EDMUND NORTHRUP MOOT

Three of seven central rural schools in Schoharie County, New York. They are Jefferson (top), Middleburg (center) and Richmondville (bottom).

A TRANSITION in the system of free public education in New York State has been taking place with increasing impetus during the last decade. Schoharie County, small in area and located on the northern fringe of the Catskill Mountains, stands in the front rank of counties in the Empire State that have blazed a new trail in school administration.

This inland individually rural and continuously agricultural county has a peculiarly consistent reputation of being conservative. The medium small farm, managed by a closely united religious industrious self-sufficient family, has been the major source of income. There always has been a just pride in the democratic organization and management of its schools. Every little "kill," "ville," "burg," "valie" and four corners have been proud of their one room schools.

We often sneer at the one room school because of its meager and inadequate program. In the valleys and hills of "Old Schoharie," tribute should be given the little red schoolhouse for its limitless contribution to a hard working faithful and constructive generation. The curriculum easily might have been classified as a winter course in readin', 'ritin' and 'rithmetic. These simple fundamentals enabled a pioneering generation to carry on commercial and social intercourse. Life was happy though severe.

Table 1 pictures the public school organization in Schoharie County in 1855.

Table 1—Public School Organization in Schoharie County, New York, in 1855

Number of schools	183
Number of teachers	183
Number of pupils	8370
Average number pupils per school	45.7
Tax income	$ 7578.00
Public funds	4690.00
Total for schools	12,268.00
Average amount for each school	67.03
School libraries	170
Volumes in libraries	16,916
County population	33,070

The facts that the teacher "boarded around" with each family in the district and that weekly wages were 10 shillings or less, along with an extremely short winter term, explain

These boys are preparing for their future occupation: agriculture.

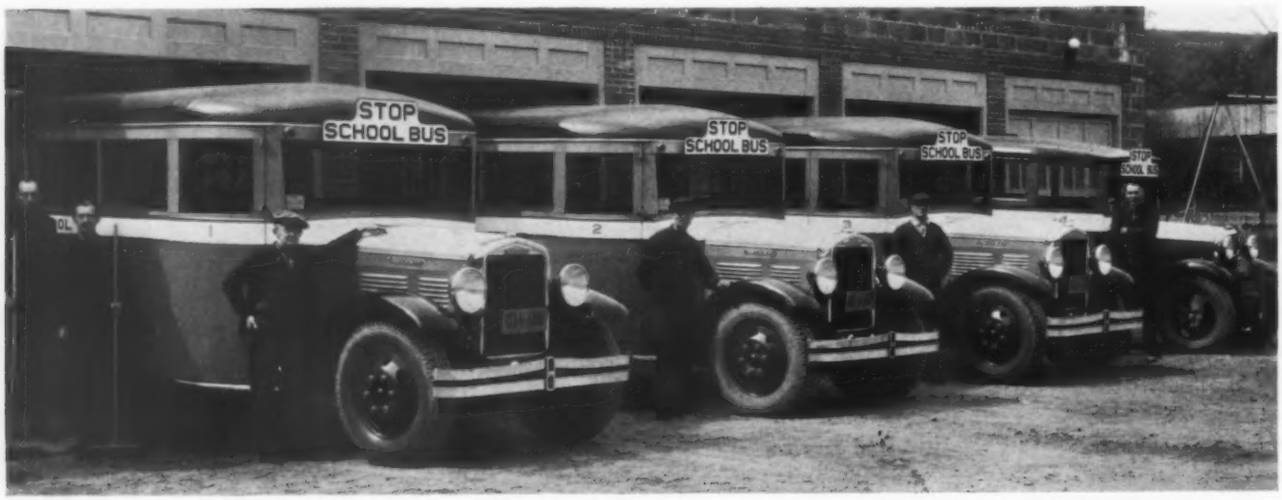
the lack of necessity for much cash.

The period from 1855 until the turning of the twentieth century saw larger schools, wood structures, appearing in the villages. These were seldom attended by the farm boys except when one had visions of entering a profession. Union free schools were established in practically every large town in the county. The academy seems never to have appealed seriously to the Schoharie natives but a rapid and spontaneous change from union free schools to high schools took place before and after the turn of the century. The place of the seminary in the scheme of education in the county is a story in itself. An 1856 county map shows a seminary at Charlotteville, Carlisle and Warnerville.

There were seven high schools carrying on the full four year academic course by 1905 and several pupils had either been graduated, were attending or were planning to go to college. Practically all the professional men in the county up to 1900 had received their training as an apprentice in some professional man's office. Medical men were the noticeable exception to this general custom.

Old Schoharie did her share in providing training for those who were fortunate enough to master the seventy-two points necessary for the attainment of the college entrance diplomas. Music was considered

A fleet of buses like this can bring pupils from a wide area.



more as recreation than as a serious part of school experience and athletics was confined to track, which needed little, if any, financial support. Coaches were unknown. Debating was a major school activity and large crowds assembled in the skating rinks of the larger towns to hear local debaters.

No section of the entire United States was stronger against the proposal of township schools and pupil transportation. Sudden revival of long distance memories recalled snow 10 feet deep. Snow removal equipment was a newfangled experiment.

Soon after 1925, when the report of the Committee of Twenty-One had a chance to cool and personalities were dropped, a few stronghearted leaders began to speak of a new type of school, a school to be located in a geographical or commercial center, a central rural school. It would offer courses in agriculture, music, homemaking, science, language, industrial arts, art and commercial subjects. A look backward from the present inspired one man to say, "Seems funny that we never considered advanced education as preparation for life in our main industry, agriculture."

A situation of antagonism to more schools suddenly changed to one in which the larger villages started a race to see which could erect the most efficient central rural school. Gilboa took the lead and built a new structure overlooking one of New York City's water supplies at Gilboa Reservoir. Sharon Springs, needing a new school to replace an outmoded and hazardous wooden structure, soon followed. Cobleskill erected an imposing three-story building looking out upon the fertile valley in three directions and sheltered from the north by towering Shanks Mountain. Schoharie enlarged her new building, while Middleburg razed an old structure to provide room for an imposing new building. Richmondville was fortunate enough to get under the tape with a small low valuation district which has excellent possibilities for further expansion. Jefferson, the last one to centralize, completed a structure with the aid of a federal grant.

The year 1938 looks out upon seven central schools in old rugged Schoharie County where the last census reported a population of 19,718, considerably less than the census figure of 33,070 in 1855. The following information gives the present picture of the educational change of eighty years in a small rural county.

Thrift habits, begun in the lower grades, are encouraged. Banking day finds each pupil ready to present his money and his savings book.

Table 2—Public School Organization in Schoharie County, New York, in 1938

Number of central rural schools	7
Number of one room schools inside central school districts	32
Number of one room schools outside central school districts	31
Number of two room schools	2

The present average tax rate for the seven central schools in Schoharie County is $1.06 per hundred valuation. Naturally there is considerable difference in the assessed valuation of property in the various towns. Some contain railroads with high valuation, one has a large public utility property, another has a thriving hotel business, all of these making it easier to present a fair taxable wealth sustaining the educational program.

The number of teachers has increased 26 per cent over those of 1855 while the pupil population has decreased 48 per cent. This means an increasing opportunity for each pupil and a broadening of the curricular experience in this new type school.

Interesting facts concerning the number of teachers and pupils and sources of tax revenue, as compared with 80 years ago, are shown in the accompanying table.

Table 3—Comparison of School Support in Schoharie County, New York, in 1855 and 1938

	1855	1938
Teachers	183	242
Pupils	8370	4322
Total valuation	(not recorded)	$18,182,428.97
Number schools	183	70
Local tax support	61%	21%
State aid	39%	79%
Av. teachers per school	1	3.45
Largest number teachers per school	1	9

The real test of this change in the system of education in any one civil area is to be judged by the quality of the product. Larger numbers of the individual pupils are progressing farther in the curriculum. A freshman class of 24 pupils in one central school was graduated without the loss of a single one of its members during the four year high school course. The next generation, experiencing the effects of the new system, will demonstrate its worth in the responsibility it assumes in maintaining and improving the environment in which it exists.

If the Cook County bookmobile is even a day late in making its rounds, the rural children outside of Chicago grow impatient and send hurried appeals for service to headquarters.

Rolling Book Stock

NOBLE J. PUFFER

DURING the last fifty years, so little attention has been given to the needs of the rural schools that they have become the stepchildren of the modern educational system. Serving as they do a sparsely populated area, drawing pupils from a radius of within 2 miles of the school, they present peculiar problems both of instruction and materials.

One of the great handicaps commonly found in one room schools is the lack of supplementary materials, particularly in the field of reading. The rural child often comes from a home with a poorly equipped library as compared with some of his more fortunate city brothers. His vocabulary, consequently, is more limited and unless this deficiency is remedied by the work offered in the school he emerges from the elementary grades with limited vocabulary and reading experience.

In many instances rural school boards have not had sufficient funds to purchase new reading material for the library each year, for to maintain a well-equipped library requires a minimum expenditure of from $20 to $25 a year.

In studying the rural schools in Cook County, Illinois, I found the difficulty common to most of the pupils was the inability to read and read understandingly. The survey indicated that the most important cause was the lack of reading materials.

To overcome this difficulty some method had to be devised to bring the materials directly to the schools. It was decided that the house trailer was a feasible plan by which well-chosen books might be brought to the rural child from which he might select material at his own level of interest. This material had to be sufficiently easy and simple, as well as attractive, to cause the child to make use of the library.

The plan was put into effect in October 1936. It has been a tremendous success. Pupils have responded with even greater enthusiasm than was anticipated at the beginning. Some books have been read by as many as fourteen pupils in one month.

The books are left for a period of one month at each school. At the end of that period the trailer, which is in reality a traveling library containing shelves for the library books and manned by a trained librarian, picks up the books left on the previous trip and permits the children to select another set, one book for each child enrolled. Should the trailer be delayed for any reason in making its visit, it is an occasion for letters from pupils urging the driver to hurry to their school.

In each county school teachers report that the traveling library already has increased the interest in reading tremendously because of the wide variety of books offered to the pupils.

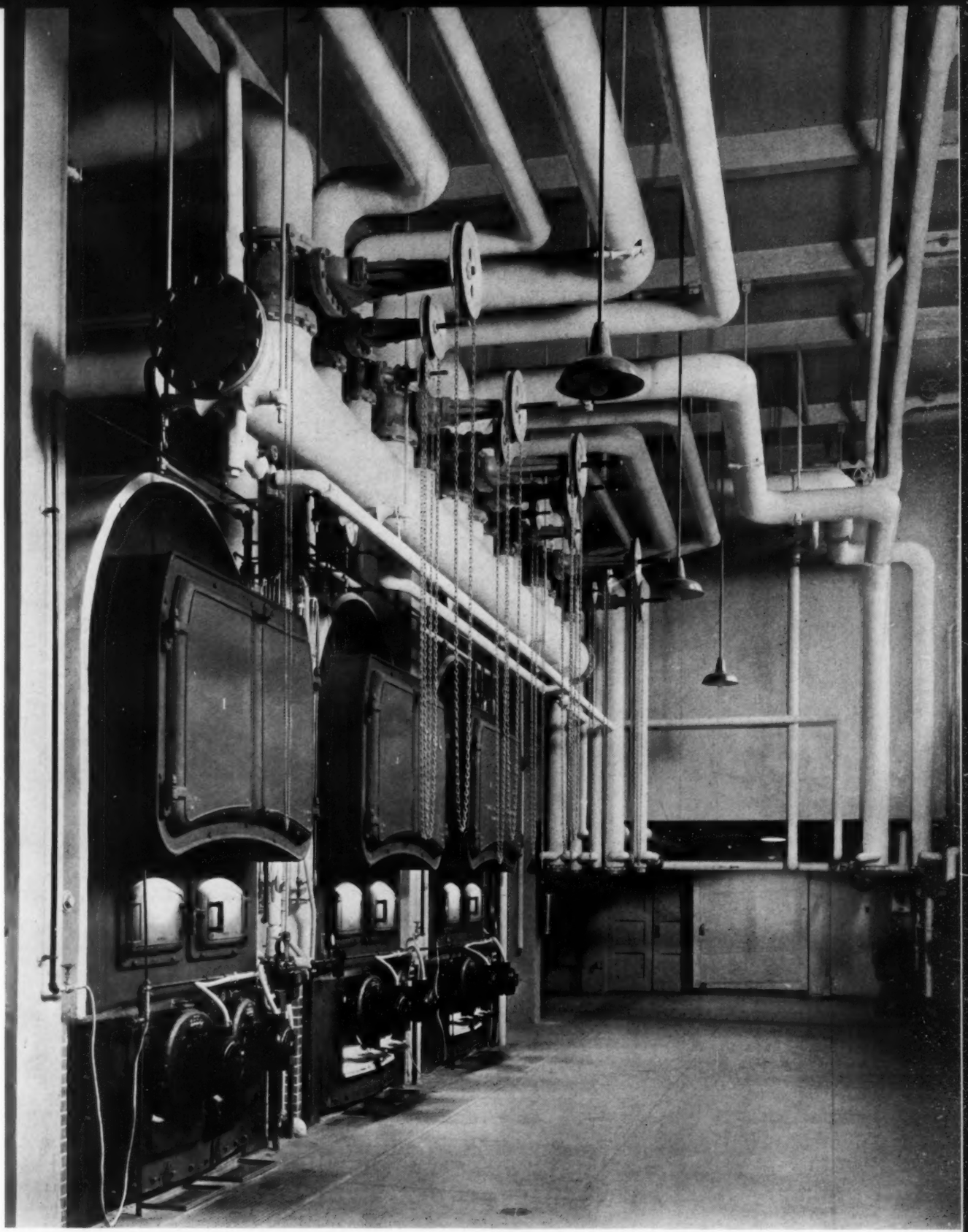
It is natural that children from rural areas should prefer animal stories. Stories of dogs, horses and wild animals predominate in the field of the child's selection. Indians and cowboys range high as the pupils' choice. Airplane books are in demand. Among children's classics the largest number want to read "Little Women," "Little Men" and "Jo's Boys."

In this instance the Cook County Board of Commissioners, seeing the need of reaching rural pupils more effectively, appropriates annually a sum of money to assist in paying the expenses of the traveling library, known as the "Bookmobile."

Individual districts also contribute to its support for the purpose of adding new books each year to replace those that will in a short time be worn out.

The idea of the traveling library need not be confined to a particular county. The plan is feasible, of course, only in areas having hard surfaced roads open the year round. It could be used successfully by any city library as a means of extending its service to the rural area.

Farm bureaus are other agencies that could put such a plan into effect as a fine type of service to rural boys and girls. Adult books could be included and the parents invited to make use of the service sponsored by the farm bureau.



● Heating efficiency is here and also a certain bold beauty in industrial design. The engine room of Wellington C. Mepham High School, Bellmore, N.Y.

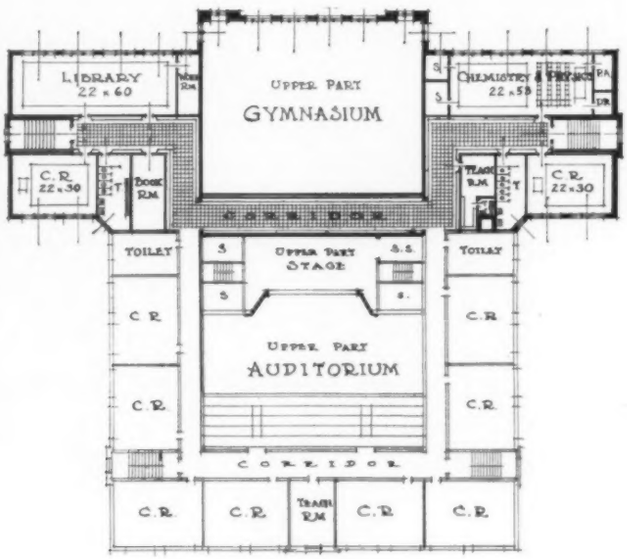
THE SCHOOL PLANT

Chatham Adds a Wing

RALPH F. BATES and WILLIAM A. PIEPER, A.I.A.

The gymnasium is directly accessible to the athletic field at the rear of the building. Locker rooms are located beneath the gymnasium and can be entered from outside without crossing the gymnasium.

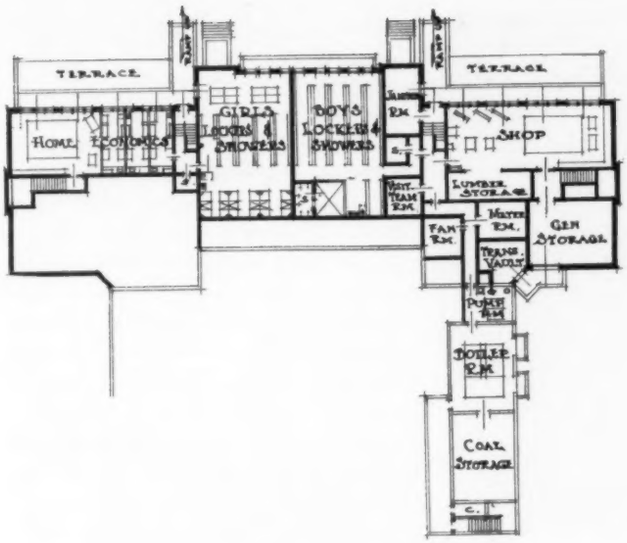
THE borough of Chatham, New Jersey, experienced a decided growth in school population during the depression years. Two years of double sessions for grades 7 to 12 convinced the public that even in depression times some action must be taken. So in March 1936 a bond issue of $208,000 was voted to build an addition to an elementary school building and to convert it into a six year high school.



First floor plan (left) and second floor plan (above). Note that the new wing and the old form a compact centralized unit.

The building to which the addition was to be made was built in 1922. It was on a site of approximately 14 acres located almost in the geographical center of the community. It consisted of 15 classrooms and a combination auditorium-gymnasium. A stage, 60 by 40 feet, comprised the gymnasium unit while the auditorium had a seating capacity of 800. The building also included an office, teachers' room, nurse's room, book and supply rooms and toilets.

To the rear of the building a spacious athletic field was available for classes in physical education in the spring and fall, as well as for team athletics.



For convenience the home economics suite is placed next to the girls' lockers and the shop adjoins the lockers and boys' showers.

The addition was planned to meet only the immediate needs for space, since a new elementary school soon will be required in another part of the town and this will make available six classrooms now occupied by grade pupils.

Confronting the school authorities was the problem of the space most needed, since obviously $208,000 could not build and equip all the necessary facilities. Confronting the architect was the double problem of how to coordinate this new unit with the old building in outward appearance, a difficult task in itself, and how to make the various parts of each unit readily accessible to the other unit.

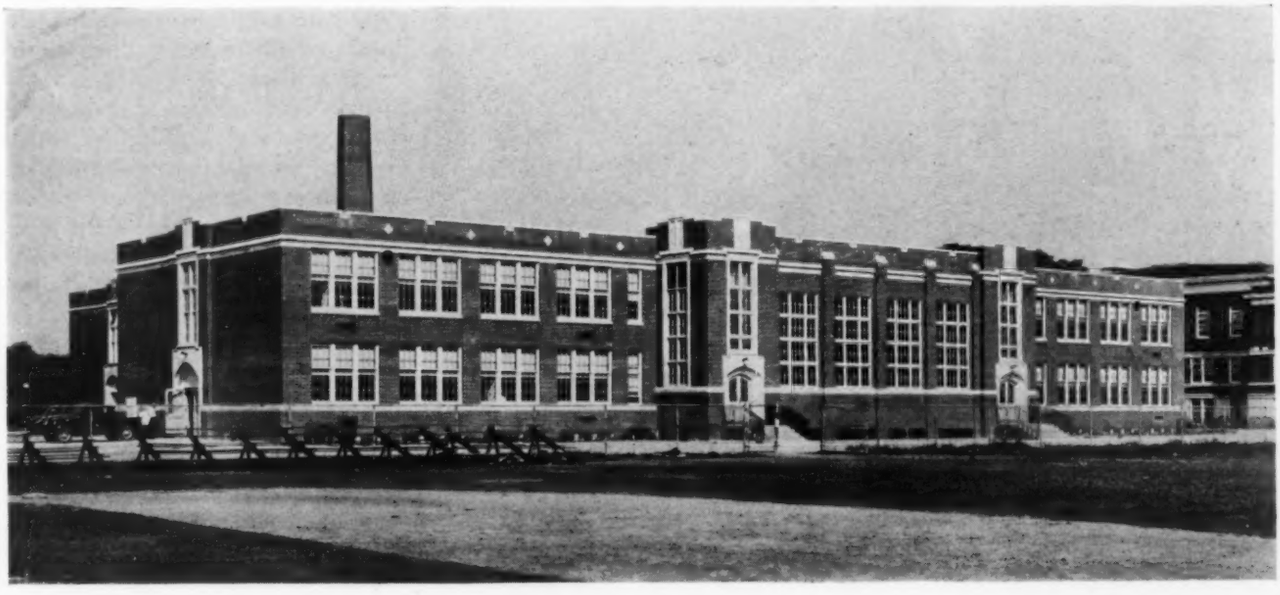
Lack of special rooms had seriously handicapped the school program for years, so it was decided to include in the new unit as many as possible of the special rooms needed in a modern high school. The following assignment of space was agreed upon: two gymnasiums, each 40 by 62 feet, divided by a folding partition; home economics room, 22 by 60 feet; library; study hall; typewriting room; four regular classrooms; medical unit; teachers' rooms; ample storage space for books, supplies, gymnasium apparatus and equipment; janitors' room, and extra toilet facilities. A rearrangement in the old building made possible a general office and a private office for the high school principal.

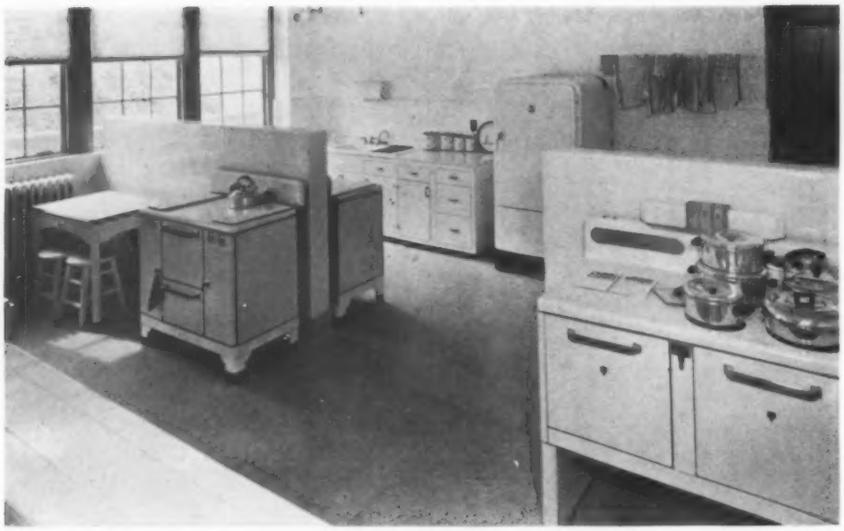
Obviously the original heating plant, none too efficient in the first place, could not carry the extra load of the new unit so a new plant was installed, capable of handling the load of the combined units and allowing reserve for a future addition. These boilers have automatic stoker equipment, pumps and air compressors. The unit ventilators in the old part, which used D.C. current, were replaced with new A.C. motors and with new fans of the same type as those installed in the unit ventilators in the new unit.

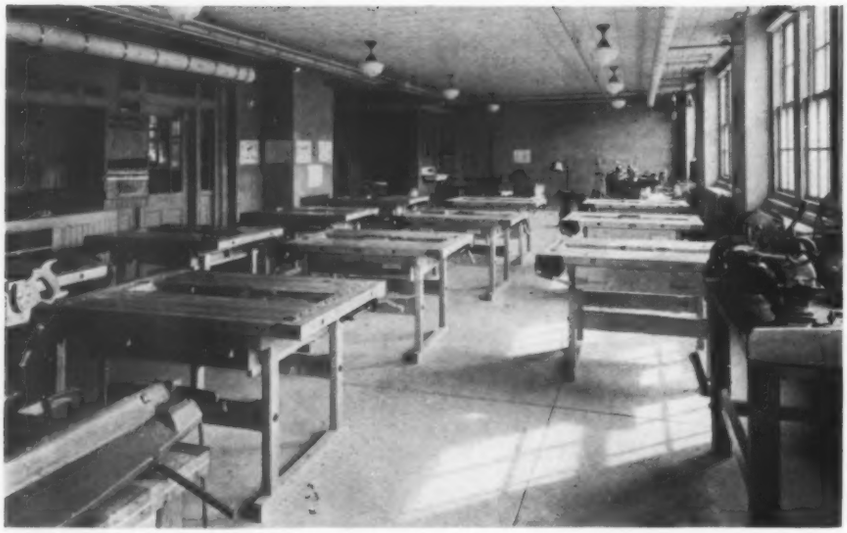
To make each part of the completed building readily accessible to the other parts, a new corridor was constructed by cutting off 13 feet from the rear of the old gymnasium and erecting a new wall to form the back of the stage. This had several desirable results: greater accessibility, wall space for lockers sufficient to accommodate the estimated total capacity of the building and an ample stage with plenty of space behind for dramatic or musical equipment during performances. The rooms adjacent to the stage which previously had been used for storage equipment, books and supplies became available for musical instruments, band uniforms and stage scenery.

A glance at the floor plans will show that the location of the new gymnasium has certain desirable features. During Music Week, Christ-

Chatham High School, Chatham, N. J., as it looks today from the rear, with its new wing designed by William A. Pieper, A.I.A., Newark. The addition has a content of 522,000 cubic feet and the cost was 33 cents per foot.







Top: The home economics department is complete with unit kitchens provided for group activities.. Center: At the opposite end of the home economics section, which measures 22 by 60 feet, is the sewing department. The general shop, directly above, is acoustically treated. It is exactly the same size as the home economics unit opposite.

mas or any special observance when large groups are participating in special programs on the stage, the pupils can be assembled in the east gymnasium and go directly on to the rear of the stage, while pupils leaving the stage go out through the rear door at the west end of the stage and directly into the west gymnasium.

Both gymnasiums have direct access to the athletic field about 50 feet from the building. The locker rooms, located directly beneath the gymnasiums, also have direct access to the field, so that pupils with muddy or cleated shoes do not have to tramp across a fine maple floor to reach the locker rooms, nor do the classes in gymnasium suits have to pass through the regular corridors to get on the gymnasium floor.

The east gymnasium, used by the girls, is easily accessible to the home economics room and the girls find this convenient in serving refreshments at their social affairs following games. The parent-teacher group also makes use of this extremely popular feature.

Folding bleachers line the north wall of the gymnasium. Seven tiers in height and capable of seating approximately 450, they can be put into place quickly. In fact, in preparation for a basket ball game the two gymnasiums can be converted into one and the bleachers made ready for spectators in five minutes.

By a scheme in use at present portable bleachers have to be set up along the south wall for the Friday night games, but plans call for additional sections to be installed within a year or two. The gymnasium has an extra high ceiling and is equipped with special lighting fixtures which give fine illumination with no glare or shadows.

All the electric service of the nearby elementary school and both parts of this building has been tied into one combined service but on one meter as a matter of economy. The transformer vault and the electric instrument room service the entire system. Gymnasiums, locker and shower rooms and toilets have separate ventilating systems. All exterior vent openings are equipped with shutters controlled by compressed air motors; the shutters are automatically

closed when the building is not in use.

Acoustical treatment has been provided in all corridors, the typewriting room and general shop. At a later date similar treatment will be given the ceiling of the gymnasium.

Both gymnasiums and the auditorium are wired for public address systems. A complete modern electric clock system, fire alarm system and intercommunicating telephone service are provided.

Corridor floors and the floor of the home economics room are terrazzo. The walls of the gymnasium, shop, lockers and shower rooms and the stair halls are glazed tile units of an attractive color, capable of standing hard treatment.

In the physics and chemistry laboratory a second beat clock is provided for time experiments. There is also a motor generator set with a panel board that distributes A.C. and D.C. currents to the instructor's table and the pupils' tables in several ranges of voltage. The same range of distribution is carried to the biology and general science laboratory immediately underneath and is made available at the teacher's desk. Six four-pupil tables are provided in the upper laboratory for experiments and tablet arm chairs are grouped in front of the instructor's desk for use in recitation periods, making the unit more flexible.

Display cases are provided in both laboratories and the biology room also is equipped with an aquarium and a germinating bed. Both laboratories are provided with lightproof shades so that the rooms may be made dark for experiments, the use of the microprojector, the stereopticon or the talking motion picture equipment.

Statistically speaking, the new unit has a content of 522,000 cubic feet. The construction cost was 33 cents per cubic foot. At present the building is occupied by 320 pupils in grades 9 to 12, 120 in grades 7 and 8 and 194 children divided among six elementary classes, a total of 634. The elementary pupils are grouped in one section of the building, have their own separate entrance and operate on their own schedule. The building was occupied when the school opened last September.

Top: The library is on the second floor. Center: The physics and chemistry laboratory has storage and apparatus rooms, a dark room and a room for a motor generator set in a panel board. Folding partitions divide the gymnasium. On one side the folding bleachers are shown in place and on the other they are folded back against the wall.

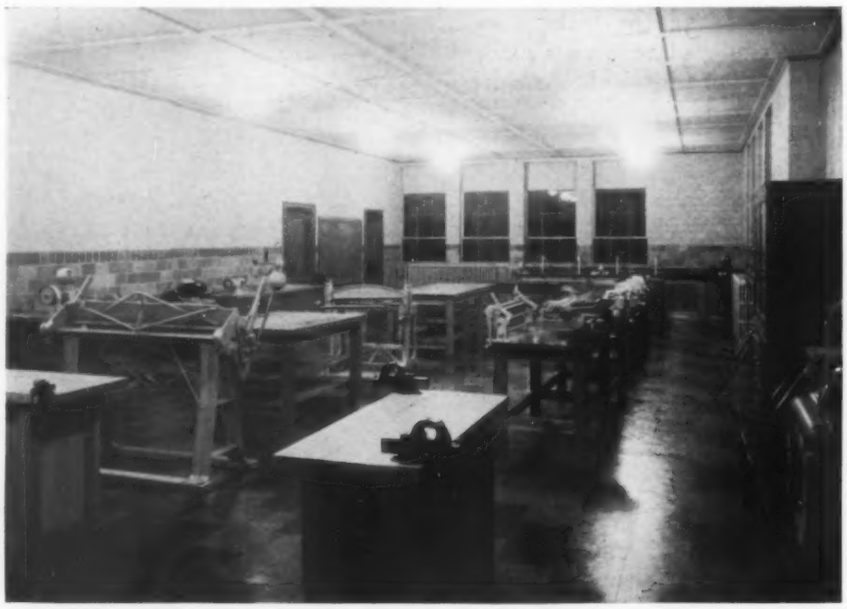
Chanute Builds Second Trade

Of factory design, the senior trade school at Chanute, Kan., represents an investment of $125,000.

JUDGING by their activity in the promotion of trade schools, the people of Chanute, Kan., are thoroughly sold on the practical side of education for their children. This community of 10,000 people in southeast Kansas has, through its board of education, just completed one of the most complete and practical trade schools to be found in the state.

It is not a new idea to the people of Chanute, this business of training the head and the hand through the use of tools. More than twenty-five years ago when the whole concept of manual training was more or less in its infancy, a group of interested and devoted women of the community appeared before the board of educaton with a request for the establishment of such work in the schools. The women even offered to provide the necessary tools and materials if the board of education would provide a room and a part-time teacher.

The board of education acted on this suggestion and a small shop equipped with a meager supply of hand tools was opened in the basement of one of the grade school buildings. That this work was popular and profitable is evident by the fact that when a junior high school building was constructed in 1913, the first one in the state of Kansas, a rather elaborate woodworking shop was included in the building plans. This work at first was offered only to junior high school pupils. It gradually spread to the senior high school, pupils from that building



Any type of metal work, from the making of jewelry to the ordinary applications of sheet metal, can be handled in general metal shop of the school.

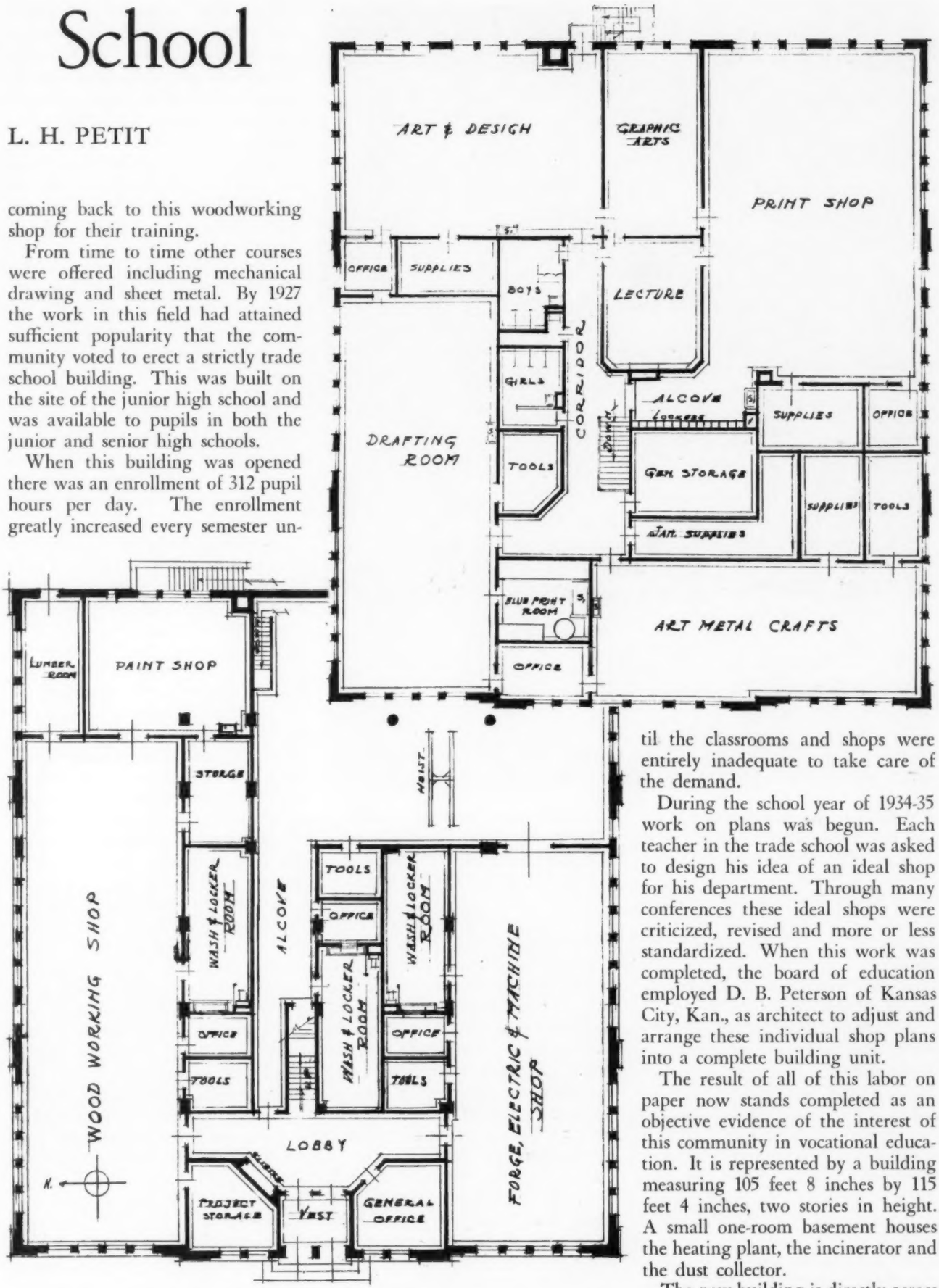
School

L. H. PETIT

coming back to this woodworking shop for their training.

From time to time other courses were offered including mechanical drawing and sheet metal. By 1927 the work in this field had attained sufficient popularity that the community voted to erect a strictly trade school building. This was built on the site of the junior high school and was available to pupils in both the junior and senior high schools.

When this building was opened there was an enrollment of 312 pupil hours per day. The enrollment greatly increased every semester until the classrooms and shops were entirely inadequate to take care of the demand.



Plans (D. B. Peterson, Kansas City, Kan.) of first and second (top) floors.

During the school year of 1934-35 work on plans was begun. Each teacher in the trade school was asked to design his idea of an ideal shop for his department. Through many conferences these ideal shops were criticized, revised and more or less standardized. When this work was completed, the board of education employed D. B. Peterson of Kansas City, Kan., as architect to adjust and arrange these individual shop plans into a complete building unit.

The result of all of this labor on paper now stands completed as an objective evidence of the interest of this community in vocational education. It is represented by a building measuring 105 feet 8 inches by 115 feet 4 inches, two stories in height. A small one-room basement houses the heating plant, the incinerator and the dust collector.

The new building is directly across the street east from the senior high

The woodworking shop (top) extends the entire length of the building. Above: The printing shop has all modern equipment.

school and junior college buildings and faces west on Evergreen Avenue. It is of factory design planned with the utmost of simplicity and a maximum of efficiency. It was designed originally to relieve the crowded conditions in the first trade school building and is so constructed that it will provide for increasing enrollments through the coming years.

The outside walls are faced with a high quality mat-surfaced brick in mottled colors. It is a design of beauty and simplicity. At the front entrance are double winged doors of the latest design, enclosing a rubber-matted vestibule. A broad concrete walk runs from the front entrance to the street. At the rear of the building is a commodious surfaced driveway where parking space is provided for trucks and automobiles. All floors and roof are reenforced concrete. The grounds are being landscaped in keeping with the setting of the building.

To the right of a commodious lobby is the office of the director, fully equipped to take care of all pupil records and accounting for the various shops. Next is the machine shop. This shop is equipped with the latest type of precision machinery including lathes, drill press, milling machine, forges and heat treating equipment.

Adjoining the machine shop is the automobile mechanics department. This room is equipped with every latest device for testing and repairing cars. There is no job in the field of automobile repair that cannot be handled here.

To the left from the front lobby and extending the entire length of the building is the woodworking shop. This shop is equipped with the latest and heaviest type of woodworking machinery including lathes, planer, jointer, table saw, band saw, shaper and sander. One small room is completely fitted for all forms of wood finishing, including an air gun for application of paints and varnishes.

Each of the three shops on the first floor has an adjoining office for the instructor, room for hand tools, and locker room. This arrangement enables the instructor to have complete charge of all pupil activities during the period assigned to his job.

On the second floor are five large shop rooms, the largest of which is the printing department. This shop is equipped with the most modern printing equipment. The school does not give instruction in linotype operation. It is the belief of the administration that the purpose of this shop is to train boys and girls to become printers. If later a pupil wishes to become a linotype operator, he is recommended to a linotype school where he may learn fully the mechanics of operating such a machine.

Printing is taught as a graphic art and all designs used in the various school forms, bulletins and diplomas come from this department. Adjoining the printing shop are a commodious stock room and an office for the instructor. On one side there is a lecture room for the use of all of the groups in the building.

On the front side of the building is a general metal shop. This shop is fully equipped for any type of metal work from the making of jewelry to the ordinary applications of sheet metal. Adjoining this shop are adequate rooms for the storage of materials and equipment and a hand tool room.

On the north side is the drafting room for use of pupils in showcard writing and in architectural, mechanical and engineering drawing. Two rooms are adjacent to the drafting room—one, the blueprinting room which is fully equipped with an electric blueprint machine, blueprint washer cabinets and storage space; and the other, for storage of supplies, materials and equipment.

On the east side of the building is the room devoted to art and design. This is fully equipped with weaving looms, pottery wheels, pebble machines and a ceramic kiln. All forms of art and design work are offered in this room. Another interesting room is devoted to graphic arts.

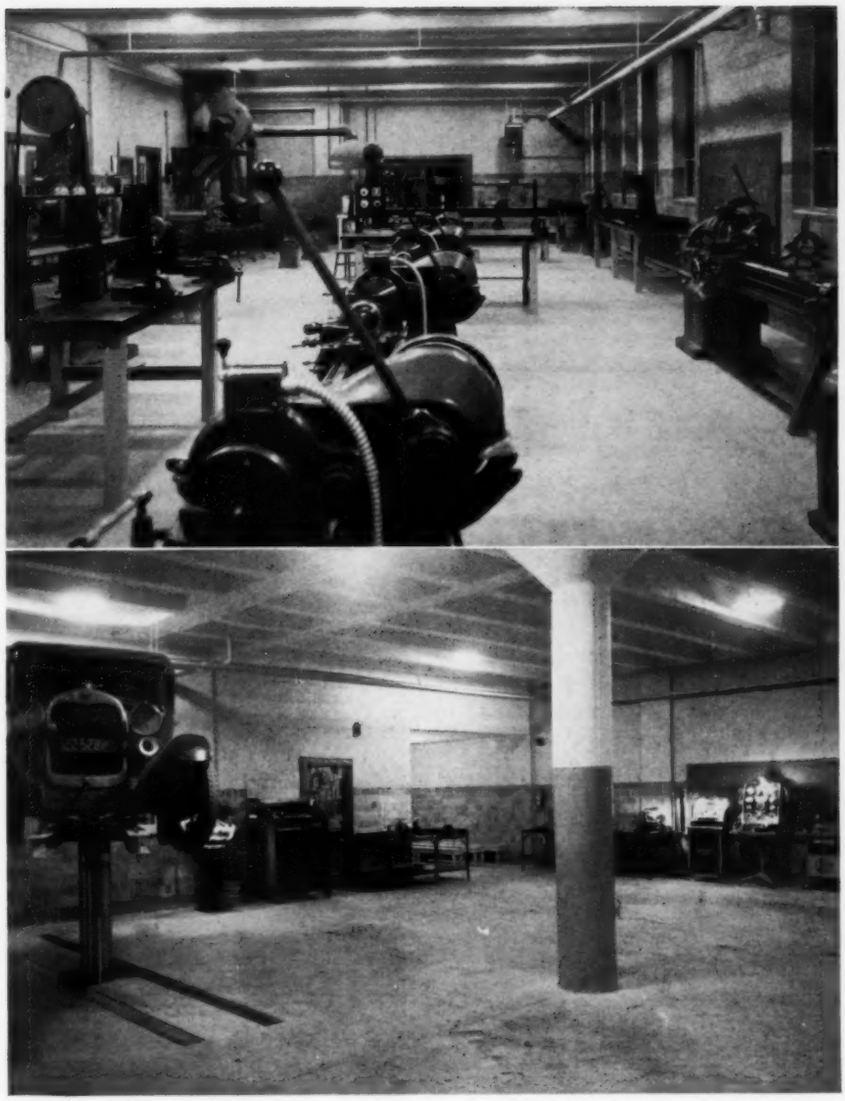
Each shop in the building is fully and completely equipped with machinery and hand tools. The furniture throughout was made in the woodworking shop. Most of it was designed by the instructors and built according to their own blueprints.

Each room receives an abundance of natural light through closely set rows of high windows of factory type. In addition, there is an abundance of artificial light provided on dark days by properly located and installed electric light fixtures. The building is heated by a coal burning furnace with automatic stoker. In each shop there are modern unit ventilators to circulate warm air under thermostatic control and to provide ventilation needs.

Throughout the building the lower 5 feet of the interior walls are of glazed tile in contrasting shades of brown, cream and buff. The upper walls of shops, washrooms and tool rooms are of glazed tile. The general offices, corridors and hallways are finished with textured plaster of contrasting tints and waxed. All the floors of the department units on the second story are asphalt tile in contrasting color designs. The floors of the machine shop and auto mechanics shop have a plain concrete surface. The woodworking shop is floored with pine.

The building is practically free from any fire danger and because of its construction meets the highest standards of safety. Insurance, therefore, is carried at the minimum rate.

The completion of this building enables Chanute to offer a full course in prevocational and vocational training to all of its boys and girls. The building erected in 1927 is now used as a junior trade school where prevocational and exploratory courses are offered to the pupils of the junior high school. These courses include printing, general metal work, mechanical drawing, agriculture, home mechanics, woodworking, auto mechanics and machine shop practice.



Top: The machine shop is equipped with the latest type of precision machinery. Above: Any motor car repair job can be done.

During the course a close check is kept on the pupil's progress to determine his natural ability.

At the senior trade school building a pupil may take three full years' work in the senior high school followed by two years of junior college work. On the completion of the three-year training in the senior high school together with the required academic work, a pupil is awarded a trade school diploma as well as a high school diploma.

The work of this institution is fully approved by the state board of education and credit is given on a full hour per hour basis, the same as for academic work. Most of the pupils working for the trade school diploma plan their work as a terminal course, although the completion of this course of study entitles a pupil to college entrance, particularly in mechanical and engineering schools.

Courses offered in the senior trade school include vocational agriculture, pattern making, cabinet making, woodworking, machine shop practice, auto mechanics, art and design, printing and graphic arts, architectural, engineering and mechanical drawing. At the present time the enrollment in the Chanute trade schools is 1,045 pupil hours per day.

This building and its equipment were made possible to the community through a grant of $56,250 by the Public Works Administration and a bond of $68,750. The expenditure for land was $10,000. The building itself represents an investment of $91,300 and the furniture and equipment cost $23,700.

Men and Maids in Uniform

MARY deGARMO BRYAN and H. H. LINN

THE importance of good appearance in employes who meet the public is frequently not fully appreciated by the executives in charge. Employes affect the visitors' general impression of an institution. If they are carelessly dressed, slovenly in carriage and indifferent in attitude, the opinion of guests or students is sure to be an unfavorable one. Alert efficient management must not slip at so critical a point.

Careful selection of employes, proper instruction in methods of work and good supervision make for a corps of workers who do their jobs skillfully, deftly, quietly and effectively. These steps are essential to the sound organization of any department and their results are obvious to all who use the services they provide.

In addition to such personnel procedures, however, the proper uniform of the working staff is of great value in increasing the morale of the employe and his pride in his job, his suitable appearance for the work to be done and his comfort on the job.

A uniform style of dress for the service employes in an educational institution has the following advantages:

1. If properly selected, it presents an attractive appearance.
2. It tends to identify the wearer as being attached to the institution and thus may avoid some delay and confusion in rendering service in a large institution where access to quarters may be limited to those known to have legitimate business in such areas.
3. It tends to raise the morale and increase self-respect of the employes.
4. Other individuals tend to have greater respect for the employes.
5. Some additional good will is gained for the institution.
6. Employes generally are encouraged to be neat and clean in personal appearance and to carry the ideals of neatness and cleanliness over into their general routine work.

In determining the uniform style of dress to be adopted by an institution, the following points should be considered: (1) attractive (but sensible) style; (2) comfort; (3) general healthfulness and safety; (4) fitness for types of jobs rendered; (5) durability (wearing qualities); (6) resistance to shabbiness and soiling; (7) ease and economy of keeping garments neat and clean; (8) economy in both original and long-time costs, and (9) specific modifications in design to provide special conveniences.

The new uniforms for maids at Teachers College, Columbia University (right) in bottle green and the old ones (below).

A report on the recent experiences of Teachers College, Columbia University, in setting up standards for uniform dress for its building service employes in several different work classifications may be interesting. It involved a change in the uniform dress worn by the maids and the set-

ting up of an entirely new style of uniform dress for male employes.

The older uniforms for maids were made of light blue and white material in close vertical stripes, giving the impression of being blue-gray in color. The material, a percale, was durable from the standpoint of wearing quality and, because of its gray appearance, did not readily show soil. While practical enough, in one sense, it was not particularly attractive as it corresponded to some degree with the type of dress adopted by certain state institutions for their unfortunate wards. In other words, the style of dress was too institutionalized to be attractive.

The new garments are a dark bottle green in color with beige collars and cuffs. The maids themselves selected this color combination from among a number of different combinations presented for their approval.

Because light collars and cuffs soil readily, these are made detachable so that freshly laundered trimmings may be attached to freshen the appearance of the entire garment.

Two types of aprons are provided as a part of the uniform style of dress. One apron has a bib and the other is bibless. When the maids are engaged in activities that tend to soil the upper part of the uniform, the bib apron is useful. When protection is needed for the skirt only, the bibless apron gives the maid a more "dressed up" appearance. The aprons are made of the same material that is used in the uniforms. They are reversible and may be worn, first on one side and then on the other. They are gored and fit neatly around the waist. Pockets, on both sides, are reenforced to prevent tearing at corners.

The material for the new uniforms is poplin. It is a durable fabric, although some other fabrics are superior in this respect; it is comfortable for indoor activity, as it is not heavy, and it presents a certain "rich" appearance that brings it out of the class of cheap garments. A good quality of preshrunk and dye-fast fabric was selected to avoid the dissatisfaction caused by shrinkage and running of dyes. There are other durable fabrics such as broadcloth and percale that could have been obtained at a price even lower than the poplin selected, but the higher price was paid to obtain the "richer" appearance that was believed desirable for building up the morale of the maids and the good will factor.

The standard uniform worn by men employes is a dark blue shirt, black bow tie, gray trousers, black belt, black hose and black shoes.

A number of special details were considered in designing the maids' dress. The sleeves are short, giving freedom of arm movement and so short that the bending of the elbow does not cause binding. At the arm pits the sleeves are large enough to allow flexible movement. Double reenforcement of sleeves and underarm section gives added strength and increases wear. An inverted pleat gives ample measure across the back but is not deep enough to give a "baggy" appearance.

The dress is in one piece, gored sufficiently to fit nicely at waist and hips yet permitting flexible movement. The skirt flares comfortably and has a 3-inch hem. The collar is becoming and fits flat to the back and shoulders. It is without the roll that soils easily against the neck. A pocket on the skirt is reenforced and double.

The garment is arranged for easy dressing and undressing purposes by means of smoked pearl buttons from the collar to the waistline. Shoulder straps hold the apron straps when the bib aprons are used.

Brown hose are prescribed to go with the uniform style of dress, because brown is a good contrasting color for the green dress and because brown shoes are obtainable to go with the hose. Cotton is the usual material.

Brown leather oxfords are specified as a part of the uniform dress for maids, unless physical deformities require some other type of foot covering. The brown shade contrasts nicely with the green dress, the leather is durable and the oxford is neat in appearance.

The importance of proper foot covering is not generally appreciated. Foot comfort and physical well-being are more important than shoe style, but in the sale of shoes emphasis has been given to the style. Recent scientific research in the field of foot coverings has thrown more light on the importance of proper shoe selection, especially for the person who is on his feet much of the time. If a shoe of wrong style or fit is worn, the body is thrown off balance to a slight extent. To maintain equilibrium, the individual must make some adjustments to overcome the off-balance.

While these adjustments may be unconscious, nevertheless they require additional physical energy, leading to greater exhaustion toward the end of the day, and they interfere slightly with the otherwise smooth functioning of the body throughout the day. In brief, improper shoes both tire and retard the wearer and interfere with efficiency.

A shoe built according to specifications developed by the Gait Laboratory, University of Rochester Medical School, Rochester, N. Y., gives the wearer proper body balance, thus avoiding the needless drain of energy required to effect physical equilibrium when improper shoes are worn. Of course, each person has to be properly fitted. The shoes give freedom to the feet without being loose. The last is sensible and fits the shape of the foot.

The heel for these women's shoes is not the very broad low type so often believed to be the sensible type for working women, but is about 1½ inches high. The height of the heel is not determined by the desire to cater to women who object to low heels because of appearance but is considered correct by the designer to give the body proper balance when the wearer is standing.

The standard uniform dress for male employes at Teachers College consists of a dark blue shirt, black bow tie, gray trousers, black belt, black hose and black shoes. Some modifications in dress are permitted for different classifications and for different conditions of work.

The men working in the boiler room who never come in contact with the faculty or student body during their working hours and who must work at times under high temperature conditions are not required to wear ties and often work without the uniform shirt. Male elevator operators wear coats in addition to other dress requirements during the winter months.

Dark blue was selected for the shirts because this is an attractive color to many people and it does not show soil readily. While other colors also meet these qualifications, dark blue was favored by the Teachers College group. The material is broadcloth, is preshrunk and is colored with a fast dye that has withstood repeated washings. The collar is processed similar to the popular semistiff collars found on dress shirts.

One flapless pocket is located above the left breast. Just over this pocket are embroidered the words "Teachers College." This not only is a badge of identification but serves the purpose of making the employes feel that they belong to the college and

Neat and trim and ready for work. Note the special shoes.

are members of the institutional staff. This "feeling of belonging" is not a small matter with them. It is distinctly a morale builder.

Shirts come in different sizes with different sleeve lengths so that a proper fit can be obtained for normal individuals. Proper sleeve length is considered important, for short sleeves bind arm movement and long sleeves are awkward and occasionally unsightly. Arm bands to hold up long sleeves add nothing to general attractiveness of dress. Employes are urged to select shirts of proper size and fit. Oversized collars and baggy bosoms are not necessary for comfort, yet many workmen will order misfitting garments if not guided.

The shirts are made of good quality material, are of full size with no skimping and with good workmanship. In fact, they meet the qualifications of a good dress shirt rather than an ordinary work shirt.

A black bow tie has been adopted for the standard uniform dress for those men who are expected to wear ties. The four-in-hand tie is not approved because of the hazard when men are working around machinery or over motors, as a loose tie end may be caught in revolving machinery. Loose tie ends also may drop into cleaning receptacles and otherwise annoy the wearer.

Dark gray was the choice for the standard trousers because it is a popular shade and also it covers the visible effects of soiling. Both cotton and wool trousers are used, but in almost the same shade. Men who occupy positions that bring them in contact with the faculty and student members are encouraged to wear the wool serge trousers, which are neat and dressy. Men employed for night cleaning and for work of a dirty nature may wear the cotton trousers made of a gray covert cloth. The cotton garments are not as dressy looking as the wool trousers and they do not hold a press so well, but they wear well and are cheaper in price, $1.15 for the cotton as against $3.50 for the wool.

The trousers are purchased in quantity lots directly from a pants manufacturer and are taken from the regular stock with no special modifications of any kind. If any special change were suggested, it would be that the pocket linings be of a heavier material. A number of employes favor the addition of another small pocket on the outer side of the right leg as a receptacle for special small tools used in their respective trades.

A black belt with silver buckle is specified as the standard medium to be used for holding up trousers. The belt is considered neater than suspenders, although the latter may be used if physical characteristics of the wearer require them.

Black hose are specified as standard wearing apparel. No particular material is specified, but the hose are to be kept clean and properly mended.

Black leather oxfords are approved as standard foot covering. No specific style is required, but the men are encouraged to keep the shoes neatly polished and properly mended.

Serving counter employes in the cafeteria are neatly dressed in immaculate white uniforms. These dresses open down the front and may be buttoned from left to right as well as from right to left, a desirable feature if the front of the dress should become soiled during the service period. Sleeves are short, and the belt is adjustable and detached.

Studies on Schools

EDWARD H. REDFORD

IN ALL that has been written on the subject of school buildings and equipment, little recognition has been given the important contribution made by the three hundred theses prepared in colleges and universities.

These studies represent a considerable amount of research and a certain refinement of technic in investigation and conclusions. They are the outgrowth of the best academic training of universities and colleges in all sections and, as such, give a cosmopolitan approach to this subject. That they have played an important part in the movement for better buildings and more rational building programs is easily attested by a cursory glance at the footnotes of almost any book on the subject.

Since these theses bear such potentialities and since they have contributed so much to the subject, it seems worth while to present a list of them as complete as it is possible to obtain. Such a list, divided according to eight or ten major divisions of the field, should present the student with a reliable and extensive group of studies. He will find a list of source material bearing the stamp of approval of a college or university. This mark more or less guarantees that here is something worth while, whereas the casual study or article may or may not be a well considered scientific approach to the subject.

The bibliography that accompanies this article presents a picture of the doctors' and masters' theses written prior to 1937. It is probable that the list for 1936 and possibly also the one for 1935 are incomplete. The entire list even is not guaranteed to be complete, but it is as accurate and extensive as it could be made without writing every school in the country.[1]

Certain limitations were exercised in the selection of titles to be included in the list. Only those theses that devote themselves primarily to buildings, grounds or equipment are listed. Theses that present a discussion of school buildings only as a part of some larger problem have not been included. Titles dealing with maintenance of buildings, care or administration of equipment, insurance and similar topics have been omitted.

Three hundred and three doctors' dissertations and masters' theses have been written on the subject of school buildings and grounds.

The whole subject of school buildings is relatively modern so far as college and university research is concerned. Of the 303 theses included in the bibliography, all but 14 have been written during or since 1927. Ninety per cent have been written since 1927. The first thesis dates back no farther than 1918.

It may be interesting to note that the first two theses on school buildings were written at Columbia and at Northwestern.

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(Continued on page 76)

BETTER PLANT PRACTICES

Summer Work Progresses

Plenty of activity these days in the maintenance departments of schools throughout the country! Work is now well under way, representing the fulfillment of plans made months ago, including provision for extra help to the extent required by the individual renovation program. A check on two or three school systems serves to indicate what is going on, also the usual procedure for summer maintenance.

Teachers Help

By April 1 plans for summer renovation are completed in Birmingham, Mich. Louis M. Randall, business manager, handles on outside contract all such work as extensive roof repairing, replacement of parapet walls and boiler replacements. Outside calking of windows, on the other hand, stonework and outside painting, are handled by the school's own maintenance department. Additional men are sometimes hired, depending upon the amount of work to be done.

An interesting experiment tried for the first time last summer worked out well. Mr. Randall employed three men teachers in his department. After a few instructions they were able to refinish desk tops, varnish woodwork and paint rooms.

It should be explained that the custodial staff does not handle any of this work. Their duties are washing woodwork, wiping down walls, washing all furniture and electric fixtures, cleaning and treating floors, scrubbing corridor floors and toilet room floors, refilling and waxing. This work takes all of their time during the summer months.

The plan of using teacher help was successful. We have Mr. Randall's word for it. "The men seem to enjoy the change and it helps solve their financial problem during the summer months."

An Early Start

The work to be carried on at Los Angeles in the summer is planned in February. All of the individual jobs which are needed to start the program at the beginning of the fiscal year, July 1, are authorized for performance by the middle of June, so that the necessary materials may be ordered and ready by the starting date.

The director of maintenance, M. P. Wylie, operates with a regular maintenance crew of approximately 750 mechanics and laborers throughout the twelve months of the year, thus spreading the normal maintenance program over the entire year. This year his plans for summer work contemplate increasing the crew with temporary help, with the probability that the force will be doubled.

"We concentrate on interior work during the summer," he explains, "*i.e.* painting, floor refinishing, refinishing of equipment (desks, tables, chairs) and such remodeling as is possible. In some of our larger schools where the repainting of the entire plant is needed, we propose to do the work by contract. The contract is awarded prior to the closing of school with the stipulation that the work must be completed before the conclusion of the vacation period.

"Very little of the summer maintenance work is done by the custodial staff as the head custodians are the only members of that staff who are employed on a twelve month basis. It is our intention, as budget appropriations are increased, to utilize the custodial staff in various phases of maintenance work during the summer months, such as (a) washing of painted walls and ceilings, (b) cleaning and waxing of hardwood floors and (c) painting of playground equipment, benches and lunch tables. This type of summer work, while desirable, is not being carried on by the Los Angeles District at this time, because of the shortage of funds."

Sioux City Plan

As in Birmingham, Mich., plans for summer maintenance work in the Sioux City public schools, Sioux City, Iowa, are made in April. At this time all properties are inspected, all needed repairs and changes are noted and each job is listed and priced for board consideration. The items that are approved in May, then, constitute the summer program, one part for the custodial force and the other for contracts. A schedule of work is set up and materials contracted for, so that work may begin immediately after the end of the school year, during the vacation period.

Custodians are assigned to summer maintenance crews according to their respective abilities and previous training. Summer pay (without regard to custodial salaries) is based upon class of work done. Following are the classifications: electricians, steam fitters, boiler cleaners, carpenters, concrete finishers, grounds maintenance, painters and common laborers.

The scope of work included for the custodial staff under direction of regular maintenance foremen includes painting and varnishing (interior and exterior); refinishing furniture (desks, tables, chairs); heating and plumbing repairs; electrical repairs, including small jobs of rewiring and extension; carpenter repairs, minor alterations, roof repairs, plaster patching; concrete repairs, and some new construction including laying of sidewalks and retaining walls (not large enough to require reenforcing) and floor sanding.

The following work is let on contract: general building remodeling; new or replacement plumbing installations, reenforced concrete retaining walls, all sheet metal jobs, electrical installations and wiring, weather-stripping, new roofing, new heating plants and resetting boilers, new plaster and brick work.

This plan, according to H. C. Roberts, secretary and business agent, attracts a higher type of custodians through provision of summer work. It also means that skilled mechanics are recognized by higher pay. Custodians are the most desirable workmen about the school buildings, good workers and trustworthy. As year round salaried men, they do not expect a regular hourly wage scale. Also, the work is well done at considerably less cost.

Cleaning Criteria

"If cleaning problems were the same in all communities, the selection and use of cleaning materials would be less of a problem," according to C. L. Crawford, assistant superintendent of schools, Muskegon, Mich. "Standardization could soon be accomplished and our difficulties would be lessened immediately."

Mr. Crawford cites some definite criteria that will aid in the selection of such materials irrespective of the community. These would include: (1) cleansing power of the material, (2) ease in use or labor economy, (3) safety, (4) freedom from harmful effect upon surfaces cleaned and (5) economy in price.

"With the application of the foregoing criteria, one can proceed to select such materials as will best serve in the cleaning of his own school plant after, of course, considering local conditions," he says. "For instance, even identical detergents may have to be used more heavily in one community than another because of natural variations in the mineral content of the water."

Painting, Plastering, Patching

R. G. DEMPSEY

The superintendent of buildings and grounds at the Colorado State College of Education at Greeley describes his technic

ONE of the most important functions in the maintenance of school buildings is refinishing walls and ceilings. This includes patching any broken plaster as well as painting or decorating, as walls must be in good condition before decorating.

The plaster should be patched first. Wood lath was used almost exclusively in the older buildings. Quite often the lath has broken loose causing the plaster to crack and fall off. The first step, then, is to remove all loose material and to renail or replace all laths affected. When metal lath has been used, cleaning off the old plaster usually will be sufficient.

Moisten the area to be patched with water. This can be done with a calcimine brush or by dashing on the water with a small broom. Care must be taken to moisten well over the edges. Then make a mixture of 2 parts of fine screened sharp sand to 1 part of cement plaster with hair or fiber in it. This should contain just enough water to make a mixture that will adhere to the surface. By experimenting the necessary amount can be easily determined. Using a steel trowel, place this mixture on the wall evenly over the surface to be patched and leave it down or back from the finished surface about ½ inch. This should be allowed to set twenty-four hours or more until it has become hard.

If the wall has a sand finish, equal parts of sand and cement plaster should be used for the finish coat. The same kind of plaster that was used in the first coat may be used by removing the fiber or hair through a fine screen. With the steel trowel, this can be placed on the wall making it somewhat thicker than the surrounding plaster. By using a straight-edge (any piece of board long enough to cover the patch and 4 or 6 inches wide) to rub across the surface, the patch will be made even with the wall.

A float may be made by using a straight board 4 by 12 inches. The float should have a handle by which to hold it. This board should be covered with a piece of carpet and used to go over the surface with a rotary motion.

If the wall has a smooth finish, put on the first coat as described. For the second coat, make a mixture of slacked lime to a consistency of putty to which has been added a small amount of gauging plaster, about one-thirtieth as much as lime. The lime will not harden otherwise. The job must be finished with the steel trowel so that the surface will conform with the rest of the wall.

In choosing the paint for the outside of school buildings, climatic conditions should be given the first consideration. A paint that will give good service in a moist climate may be unsuitable in the dry climate that prevails in several of the western states. White lead and linseed oil should be the base in all outside paints and will give good results in the lower altitudes. In the higher altitudes, oxide of zinc or other oxides should be used to prevent chipping and cracking. There is no objection to using a good ready-mixed paint, as many manufacturers prepare a paint that is suitable to the locality in which it is sold.

The second consideration should be color. To some extent this should be determined by the construction of the building; if of wood, several colors may be used, one for the field and another for the trim. On brick buildings usually one color only should be used and this should be in harmony with the color of the brick. Colors should also be selected that will stand up under local conditions. Buildings located near industrial plants or railroads where they are subjected to coal smoke and soot should not be painted white.

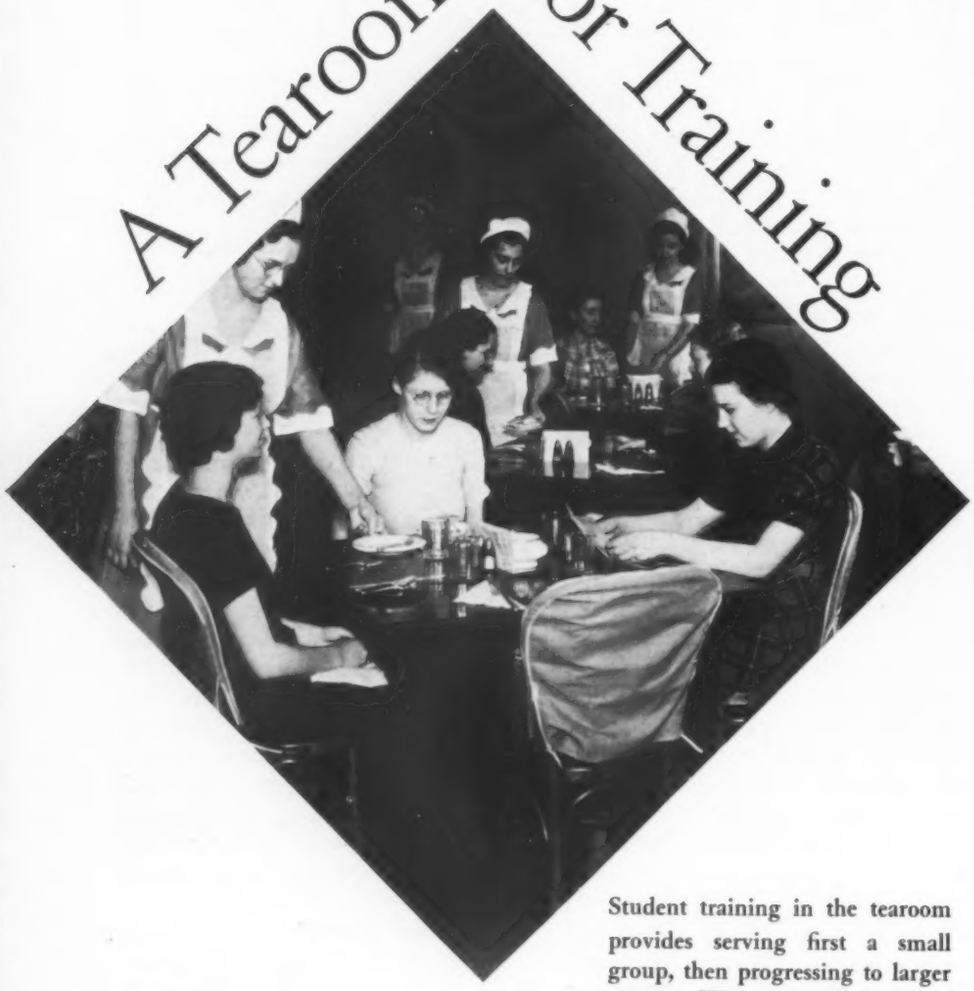
The problem of decorating the walls and ceilings of school buildings has never been solved and probably never will be, as there is a decided diversity of opinion along this line. In a school building visited some time ago the walls were painted a bright blue and then stippled over with orange. It is not difficult to visualize the pupils spending much time trying to align the orange spots.

While individual ideas should be given some consideration, the importance of available light on the desks should be the first thought. The location of the room, the amount of outside light and the lighting fixtures all play a part in the proper distribution of light. The ceiling should always be left as light as possible, as the most light is reflected from it when indirect or semi-indirect fixtures are used. The side wall may be several shades darker to give a contrast. A flat wall paint gives much better diffusion of light reflection than a gloss paint. Good results have been achieved by using a light ivory for the ceilings and several shades darker for the walls.

In grade school buildings it has been found practical to paint a dado 3 or 4 feet high on corridor walls with a darker paint. A number of schools are using a water paint or calcimine; this makes a fine finish for classrooms, but cannot be cleaned and must be redecorated when soiled. A finish of this type requires considerable work, especially on smooth-finish plaster walls, as the old finish should first be removed.

In painting classrooms no hard and fast rule can be followed, but one must always keep in mind the fact that the available light in a room often can be increased as much as 40 per cent by changing the color of the walls and ceiling.

A Tearoom for Training



Student training in the tearoom provides serving first a small group, then progressing to larger groups. Waitress uniforms and the chair back covers are made in the industrial sewing department.

EDWINA F. HEITZEBERG

THE training in the cafeteria tearoom department of the Hadley Vocational School in St. Louis is designed to enable pupils to gain efficiency in their chosen vocation so that they can obtain employment in cafeterias and tearooms.

The department consists of three connecting rooms facing the south. This location gives adequate light and sunshine. The kitchen is placed between the tearoom and cafeteria so that food can be dispensed to both serving units, and it is planned along commercial lines, having equipment for quantity cookery. The equipment is both hand manipulated, such as the bread and meat slicers, and electrically driven, as the potato peeler and the mixer.

The tearoom, seating 64, is furnished with tables made in the woodworking department. These tables are of three sizes, seating two, four and six guests each. This arrangement gives a pupil training that allows her to start serving a small group and as she obtains proficiency and speed to progress to a larger group. As a guest is in the room less than twenty-five minutes, the waitress must learn to serve speedily as well as accurately.

The cafeteria has eight tables on the ground floor seating six guests each and three tables on the balcony each seating four. The cafeteria counter consists of a sandwich and dessert unit, a hot food unit, a salad unit and a milk and ice cream unit. The pupil works at the various stations so that she learns the different setups, such as operating the electric checking machine and serving as cashier. Next to the checking machine is the cashier's stand. A customer passes from the checker to the cashier and immediately pays his check. Each girl also obtains training as bus girl and water dispenser.

Uniforms worn during the serving periods, both in the tearoom and cafeteria, are made in the industrial sewing department.

The noon hour of the school is divided into two lunch periods of twenty-five minutes each with fifteen minutes between. This fifteen minute period serves as a cleanup time. The department has only one paid attendant, who operates the dishwashing machine and does the heavy lifting. After a pupil learns to operate this piece of equipment there is no further educational value in it.

During the time previous to the serving of the luncheon, the various foods are prepared either by pupils working in groups or by a pupil working alone. In this way the girls learn to work independently and also

TYPICAL MENU

Luncheon 40c

Luncheon includes bread and butter and a beverage.
Oyster soup or tomato juice cocktail
Salmon croquette or creamed ham
Potatoes au gratin
Spaghetti or creamed peas

Salads

Head lettuce, coleslaw, shrimp salad or avocado and grapefruit ring

Desserts

Chocolate sponge, apple pie, gingerbread, honeydew melon or ice cream

A la Carte

Oyster soup 8c
Tomato juice cocktail 5c
Salmon croquette 7c
Creamed ham 6c
Potatoes au gratin 5c
Spaghetti 5c
Creamed peas 5c

Salads

Head lettuce 6c
Avocado and grapefruit ring 6c
Shrimp salad 6c
Coleslaw 5c

Desserts

Chocolate sponge 6c
Apple pie 8c
Gingerbread 5c
Honeydew melon 7c
Ice cream 5c

Bread

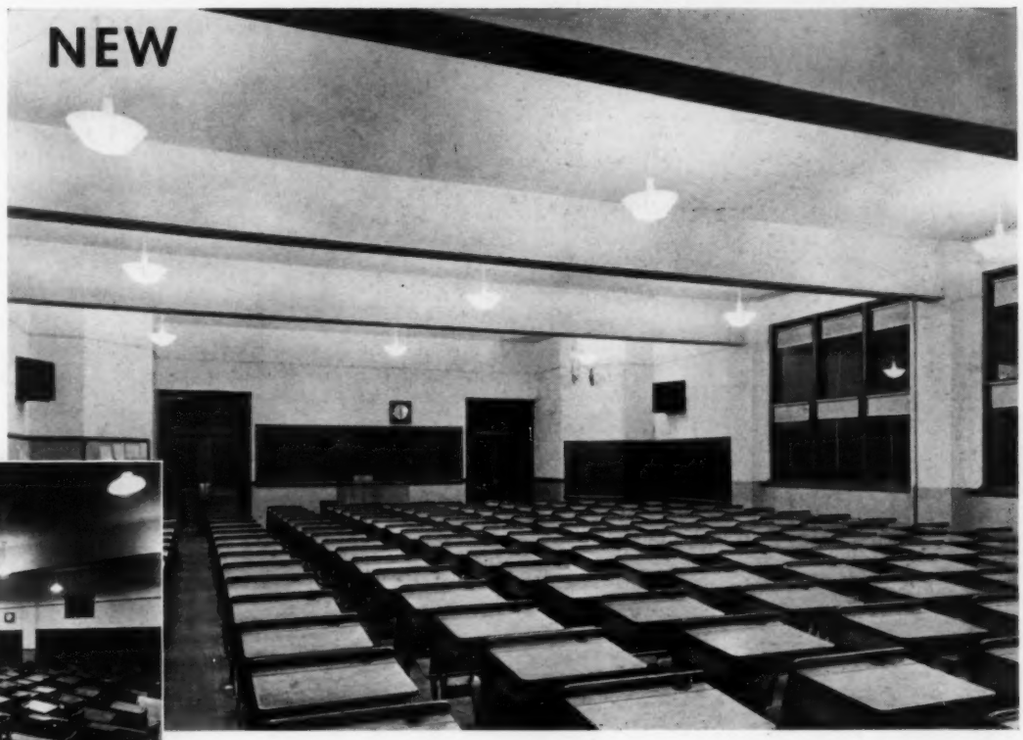
Rye or white bread and butter 3c
Graham muffins and butter 5c

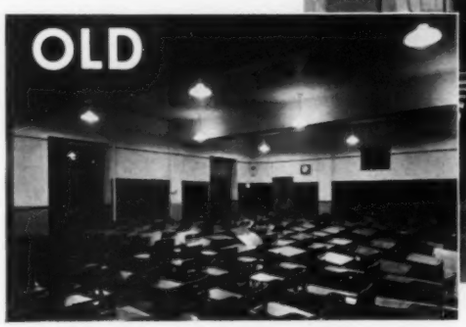
Beverage

Iced tea 7c
Tea 6c
Coffee, cup, 5c; pot, 8c
Milk 5c
Bulgarian milk 5c

See what a difference in LIGHT

Quick to appreciate the need of Better Light for Better Seeing, the Board of Education in Highland Park, Michigan, has recently begun a program of relighting its schools to present day standards. These two photographs of similar classrooms before and after installation of Wakefield COMMODORE lighting units, present striking evidence of the improved seeing conditions brought about by this program.





Courtesy Detroit Edison Company

...when Highland Park High School modernized with COMMODORES

THESE two "before-and-after" photographs taken at night in comparable classrooms of Highland Park (Michigan) High School, show why we believe you will want to see the Wakefield COMMODORE before you decide on school lighting.

More Light, and Better Light

The Commodore provides 83% of the light from the bare bulb, according to Electrical Testing Laboratories, famous independent research organization . . . more light than most indirect fixtures. And it is soft, glareless light that helps both pupils and teachers see better.

Its cheery light encourages greater cleanliness and better citizenship.

Featherweight Plaskon Shade Cuts Maintenance Costs

Thanks to its 18-ounce shade molded from Plaskon, the Commodore is easier and safer to handle and clean; breakage is less; maintenance cost is low. This light weight also permits greater factors of safety in other parts of the fixture.

● NEW 60-PAGE BOOK ON SCHOOL LIGHTING

Prepared under the joint sponsorship of the Illuminating Engineering Society, and the American Institute of Architects, and approved by the American Standards Association, this new, authoritative book "American Recommended Practice of School Lighting," is just off the press. We have a limited number of copies which we will be glad to send, free, to interested school officials. If you want one, we suggest that you write today, since we can fill requests only while our supply lasts.

Advantages you get with PLASKON:

- Efficient lighting
- Greater safety
- Less breakage
- No splintering
- Low upkeep
- Uniform color

Ask to see this unit demonstrated in your office. Takes only a minute. Requires only a floor plug. No obligation.

THE F. W. WAKEFIELD BRASS CO.

77 NATWOOD PARK

VERMILION, OHIO

Each day a complete luncheon is prepared and served, the same food being served in the tearoom and the cafeteria so that the pupils may see how identical items may be sold in two different ways.

to cooperate with their fellow pupils.

Each day a complete luncheon is prepared and served. The same menu is served in the tearoom as in the cafeteria, enabling the pupils to see how the same items may be sold in two different ways. A guest in the tearoom may order the complete luncheon or à la carte. This gives the pupils opportunity to receive different types of orders. The menus, one of which is reproduced, are printed daily by the printing department of the school. Special holiday and seasonal foods are prepared and preserves, pickles, marmalades and tea cakes also are prepared and sold. Last year the demand for Christmas tea cakes was greater than the supply.

In this department, as elsewhere in the school, a pupil spends one half of her day in practical laboratory work and the other half of the day in academic subjects. Most of these subjects are directly related to her vocational choice. She studies trade information, trade mathematics, trade science and English during the first year of her course. In the second and third years, which correspond to the eleventh and twelfth grades, she also takes up industrial history, economics and related art. She thus receives a well-rounded education.

FOOD FOR THOUGHT

Conference Program

• The program for the fourth annual Conference of Food Service Directors to be held in Rochester, N. Y., November 4 and 5 is of interest to all managers of school cafeterias and others interested in food administration. These regional conferences are fostered by the American Dietetics Association and the American Home Economics Association and a joint committee of members of both associations is working with the executive board of the conference in planning this meeting.

Among the speakers are: Dr. Lydia Roberts, University of Chicago; Prof. W. S. Mueller, Massachusetts State College, on chocolate milk; Dr. Estelle Hawley, University of Rochester, on current nutritive standards in low cost lunches; Mary McCormick, New York State Department of Education, on educational possibilities of the school lunchroom in every type of school; Dr. Mary deGarmo Bryan, Teachers College, Columbia, on the conference study on layouts, and Dorothy Behm, Board of Education, Syracuse, N. Y., on the conference study on finance.

Round table discussions will provide an opportunity for the interchange of experience and special attention is being given to recent research in the practical field.

Special trips are being arranged to the public school lunchrooms, the hospitals and restaurants, the Eastman Kodak Company and the University of Rochester including the Eastman School of Music, and the Art Gallery, Niagara Falls and Canadian points.

The Hotel Seneca is the convention headquarters, and the Powers Hotel, Sagamore Hotel and Rochester Hotel are convenient for the meetings. Reservations should be made early. Etta H. Handy, University of Rochester, is chairman of the publicity committee.

Detroit Managers Confer

• More than 100 members of the Lunchroom Managers Association of the Detroit public schools met for the association's first annual conference on May 17. One session was devoted to reports of special studies, such as judging food products, recipe testing, methods of food cost control and the problem of leftover foods.

At the second session, Lelia McGuire, Merrill-Palmer school, talked on "The Depression Child"; Dr. H. L. Harrington, supervising director of intermediate schools, discussed "School Lunch and School Progress," and "The Whole Child Goes to Lunch" was subject of an address by Edith Saw Ellsworth, principal of the Wilkins school.

Will Fight Commercialism

• A 21 page mimeographed bulletin that has come to our desk is the first issue of the *Newsletter* of the department of home economics in institution administration of the American Home Economics Association.

Prompt informal news of what people are doing, what meetings are being held, what professional problems are coming up and what new sources of information are available, are the services that the *Newsletter* will give, according to Helen W. Atwater, editor, *Journal of Home Economics.*

"A newsletter that provides these will not only make the members of the department better informed and hence more efficient on their immediate jobs, but will give them a strong sense of professional interests and make it easier to take effective action when professional standards are involved.

"The school lunchroom situation is a case in point. For some time all of us have been more or less conscious of a tendency for city school lunchrooms to slip into the hands of commercial operators. . . . The department newsletter would justify its existence if it did nothing more than develop professional solidarity on the principle of having the school lunch managed by people who will make it an integral part of the health education program."

Choose Your School Buses Carefully . . . Choose INTERNATIONALS

Selecting a new school bus is just about as important as selecting a new member of the faculty. Both have to measure up to rigid standards. You compare records; you check credentials; you study qualifications to fill the job. Investigate International School Buses on the basis of safety, economy, dependability, comfort, and smart appearance. You'll find them most satisfactory.

September is not many weeks away. If your school needs new buses this fall, now is the time to go to the nearest International dealer or Company-owned branch and get full details about these leaders in the school bus field. Check their record against your needs and be assured of full transportation value at lowest cost during all the years these buses are in use.

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Under a cork ceiling

SOUND-ABSORBENT ceiling of Armstrong's Corkoustic improves hearing conditions and reduces distracting noise in the assembly room of the Edwin Markham School, Pittsburgh, Pa.

EVERY WORD CAN BE HEARD

THERE are no acoustical problems in auditoriums with Corkoustic ceilings. No "loud spots" or "dead spots." No booming echoes or reverberations. Students listen attentively, because they can hear clearly without straining to catch words. Distracting noises are hushed.

Armstrong's Corkoustic soaks up sound the way a blotter soaks up ink. Reducing noise 50% or more, it is an important aid to concentration in schoolrooms, libraries, offices, auditoriums — wherever people gather in groups.

Corkoustic's distinctive texture and attractive colors make it a decorative interior finish. It is sanitary and inexpensive to maintain. Its high light-reflection value reduces lighting costs. Natural insulating qualities lower heating and cooling expense.

Corkoustic can easily be installed over existing ceilings. Get full information now. Write for free copy of "How to Reduce Noise." Armstrong Cork Products Company, Building Materials Division, 1234 State Street, Lancaster, Pennsylvania.

Armstrong's CORKOUSTIC

NEWS IN REVIEW

Catholics Oppose Direct Aid

At a constitutional convention hearing recently in Albany, N. Y., the Roman Catholic Church was placed on record as being opposed to direct financial state aid for parochial or other denominational schools, but as favoring religious instruction in public schools.

The church favored extension of the same health and welfare services and the furnishing of transportation and secular textbooks to pupils of religious schools that are enjoyed by those attending public schools, according to Charles J. Tobin, secretary of the New York State Catholic Welfare Committee.

The hearing was on a proposal that will strike from the state statutes the provision which prohibits the state and its subdivisions from using public property, credit or money or authorizing or permitting either to be used directly or indirectly in aid or maintenance of any schools under direction or control of any religious denomination, and would insert a provision authorizing the legislature to provide for appropriations of public money for the support of religious schools.

Under statutory law municipalities and school districts in New York State may provide free transportation for children attending parochial schools. This is now being done generally throughout the state wherever free transportation is provided for public school children.

SUMMER COURSES

Educational Diplomacy

A joint conference of school board members and educators to develop better understanding between laymen acting as school board members and the professional workers of school systems will be one of the important conferences to be held at Teachers College, Columbia University, during the summer session.

The two day conference will open August 3 with an evening meeting at which representatives of boards of education will discuss the controls in public education and the ways and means of obtaining further democratization in public school systems. On August 4 the representatives of school boards from eastern states will hold conferences in the morning on the topic of "The Work of the Board of Education" and in the afternoon on the topic, "The Kind of Schools Our Communities Desire." The meetings are open to the public and to professional workers in education.

Another important summer conference at Teachers College will be the joint meeting of school administrative and supervisory officers with community workers in public health, social work, community housing, delinquency, crime prevention, probation and parole. The general theme of the conference is "How to Improve Community Life Through Better Cooperation Between the Agencies of Public Education and Other Agencies Interested in Community Development." Meetings are open to educators and community workers. Laymen also are invited.

Peabody's Reading Clinic

Peabody College will conduct its second annual Reading Laboratory Institute, July 7 to 16, for presentation of all phases of the problems of instruction, diagnosis and evaluation in the field of reading in the public schools.

More than 150 persons were registered for the first institute during the summer of 1937. The second institute has been organized for teachers at all grade levels, administrators, supervisors, directors of reading clinics, teachers of exceptional children and educational clinicians.

Educators attending may observe laboratory demonstrations, obtain practice in the use of reading laboratory instruments, observe the application of clinical procedures to problem cases and hear outstanding national leaders in the reading field.

Ohio State Institute

A secondary Institute on Progressive Education will be held at Ohio State University, August 16 to 19. Faculty members of the institute will include Prof. Samuel Everett, Northwestern University; Prof. L. A. Cook, Ohio State University, and G. Derwood Baker, principal, Fieldston High School, Ethical Culture Schools, New York.

Cornell's Graduate Study

Cornell University has made provision to allow students in special fields of education to obtain the master's degree and also to satisfy the certification requirements of New York and

other states in its graduate school of education during the summer session, July 5 to August 13.

Special conferences are to be held during the summer session. "The Youth Problem of America" will be discussed from August 4 to 6, educational and vocational guidance, vocational education and special school and community service being emphasized.

City supervisors of home economics will convene for a two weeks' study conference, July 5 to 15. Problems in furthering education in home and family living will be discussed by leaders in home economics fields.

Administrative Requirements

Newly employed Indiana superintendents and principals in the future must hold administrative licenses based on the master's degree in all first-class and continuous commissioned high schools. Administrators now holding positions under the old law of 1923 are secure in their present positions, but come under the new ruling if they seek new employment. This requirement, along with new requirements for four year elementary teaching licenses, is expected to throng Indiana colleges and universities during the forthcoming summer sessions, according to Registrar Harry E. Elder of Indiana State Teachers College, Terre Haute, Ind.

INSTRUCTION

Michigan Establishes Ed.D. Degree

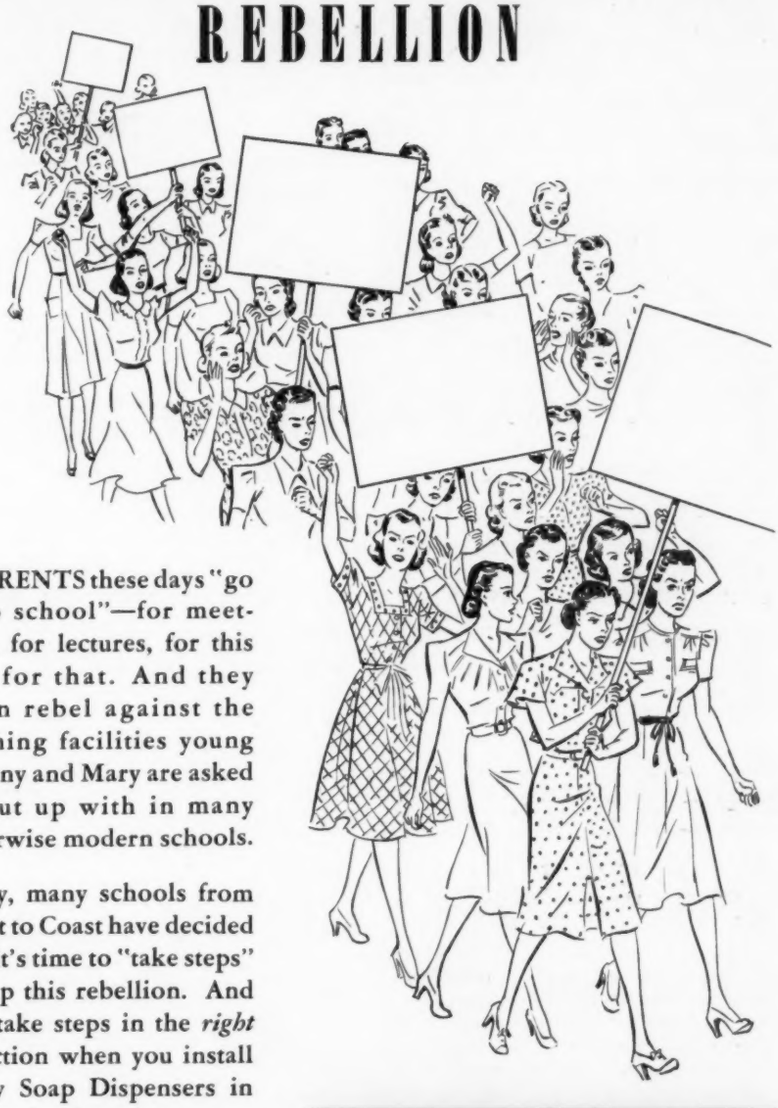
The executive board of the University of Michigan graduate school voted recently to approve the establishment of the degree of doctor of education. Since the present Ph.D. degree is a research degree leading primarily to university work, there is a need for one which would be professional and designed especialy for those preparing for work in administrative and supervisory positions as well as for high school and college teaching, it was said. There is ample precedent for the establishment of such a degree; at present the Ed.D. degree is offered by 31 universities.

MEETINGS

Conflicting Resolutions

The American Association for Adult Education, meeting recently in Asbury Park, N. J., withdrew a resolution recommending that attention be given to safeguarding adult education against federal and state control, yet contradictorily adopted a resolution express-

AN EASY WAY TO NIP THIS REBELLION



PARENTS these days "go to school"—for meetings, for lectures, for this and for that. And they often rebel against the washing facilities young Johnny and Mary are asked to put up with in many otherwise modern schools.

Many, many schools from Coast to Coast have decided that it's time to "take steps" to nip this rebellion. And you take steps in the *right* direction when you install Ivory Soap Dispensers in your school washrooms.

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ing approval of a report that had questioned the advisability of subsidizing a nationwide program of adult education with federal funds. Dr. William A. Neilson, president of Smith College and retiring president of the association, insisted that adult education must not be attached to any definite program of social action.

No Songs by Elementary Pupils

New York's elementary school children did not participate in the concert given by the New York public schools at Madison Square Garden on June 29 for the National Education Association, since it was deemed impossible to provide for the safe transportation of pupils. Length of the program would bring pupils home at a late hour.

BUILDINGS

Indiana's New School

Indiana University recently dedicated its new $750,000 school of education building which houses the Indiana University School, built to accommodate 600 pupils from kindergarten through high school.

The school will begin instruction next September. It will serve as a training school for teachers, a demonstration school to illustrate proper methods of teaching and a laboratory in which experiments can be carried on for improving teaching methods, according to Dean H. L. Smith.

Although the school will operate under direct supervision of Indiana University, it will become a unit of the city school system of Bloomington, Ind., and will be maintained through city funds.

Willard E. Givens, secretary of the N.E.A., was the principal speaker at dedication services of the school.

Hershey Junior College

Through the philanthropy of M. S. Hershey, Pennsylvania manufacturer, the community of Hershey, Pa., will have a new junior college opening in the fall. Eligible for entrance are graduates of the Hershey public schools and the Hershey Industrial School for orphans. The only expense to students will be $15 for textbooks, which will thereafter become the property of the students.

The new institution will not imitate existing four year college courses but rather will stress the immediate needs and interests of the local community. Three types of courses will be offered: academic, business and industrial.

Plans $8,000,000 Program

The San Francisco Board of Education has ordered the preparation of plans for an $8,000,000 school building program to be constructed with the aid of P.W.A. funds. The city architect was instructed to consider seventeen individual projects.

Culver Installs Air Conditioning

Culver Military Academy is installing an air conditioning system in its barracks at a cost of approximately $150,000. Water for the system will be supplied from a well that has been drilled on the campus. The entire air conditioning plant will be located below street level. It is contemplated that the plant will be completed by next fall.

RADIO

Radio Workshop at Interlochen

A radio workshop for practical training in the writing, musical mounting and production of radio programs will be added to the curriculum at National

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Music Camp, Interlochen, Mich., during the 1938 season.

Four instructors experienced in using radio for education and guest lecturers will comprise the Radio Workshop faculty. Script and continuity writing and program planning will be taught by William Dow Boutwell, director of the U. S. Office of Education radio project.

Program direction and production and music for radio will be taught by Rudolf Schramm, music director of the radio project. Jerry Weisner, assistant to the director of radio, University of Michigan, is in charge of instruction in sound effects and engineering and also in charge of a special course of instruction in the use of the new short wave facilities recently allocated to education by the Federal Communications Commission. Director Joseph E. Maddy of National Music Camp will instruct in radio music teaching methods.

The Radio Workshop has been organized to meet the needs of teachers and school executives for training in the technics for use of radio for school and community education. College credit may be obtained through the Illinois State Normal University.

Education by Radio Honors

All three awards for outstanding radio dramatizations in the noncommercial educational class were given to programs of the U. S. Office of Education radio project by the Ninth Annual Institute of Education by Radio.

First award was given "Brave New World," Latin-American dramatic series, widely known as the "good neighbor" program of the air. First honors were awarded specifically to the program, "The Little Indian of Mexico," which dramatized Juárez, who freed Mexico from Maximilian.

Honorable mention was given "The World Is Yours," dramatic presentation of scientific and artistic lore of the Smithsonian Institution. The award was for "The Story of Electricity." Honorable mention also went to "Christ of the Andes," another of the "Brave New World" programs, the story of the erection of a statue of Christ, cast from cannon, high in the Andes on the Argentine-Chilean border as a symbol of friendship.

VISUAL EDUCATION

Drinking Health

A two reel silent motion picture, "Drinking Health," based upon a lecture by the U. S. Public Health Service on the evils of the common drinking cup, will be lent without charge to organizations by the Films of Commerce Company, 21 West Forty-Sixth Street, New York. This safety film is available in both 16 and 35 mm. widths. It encourages two important health habits: (1) the drinking of sufficient water for health and (2) the avoidance of the common drinking cup in order to prevent disease.

Visual Farm Program

Northwestern State Teachers College, Alva, Okla., has sponsored a visual farm education program in cooperation with the local county farm agency and the local chamber of commerce. Thirty-seven programs have been given and approximately 10,000 people have participated.

"Why Not Live?"

A new one reel film on the subject of safety, entitled "Why Not Live?" has been issued for distribution to schools by the American Red Cross.

The picture dramatizes traffic safety, points out that the highway is not by any means the only location of death and injury and that a large proportion of accidents occur in the home and on the farm. A passage is devoted to the dangers of carelessness while swimming

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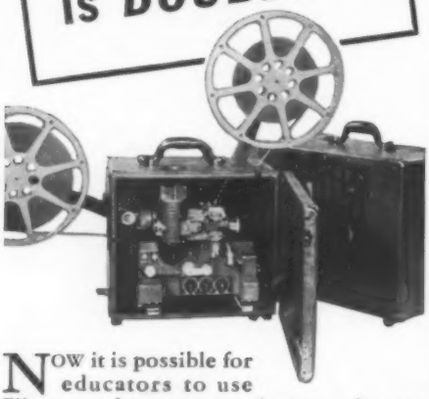

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Posture Pictures

A two reel film on posture is being issued through the children's bureau of the U. S. Department of Labor. The film may be obtained in either 16 or 35 mm. sizes. Transportation charges are the only costs involved.

Ohio State Institute

An Institute on Visual Instruction in Higher Education will be held on the Ohio State University campus, August 1 to 5, giving special attention to teacher training. The purpose of the institute is to acquaint persons connected with higher education with the visual materials available and to give practical demonstrations of their utility.

NAMES IN NEWS

Superintendents

FRANK W. PHILLIPS, director of teacher training at the Northern Illinois Teachers College and superintendent of schools, DeKalb, Ill., has resigned to accept the superintendency of schools at Elgin, Ill.

J. F. GOULD has succeeded the late GEORGE F. WOMRATH as assistant superintendent in charge of business affairs, Minneapolis Board of Education. His appointment became effective June 15.

EDWIN R. VAN KLEECK, superintendent of schools at Norwich, N. Y., has been appointed to the superintendency of schools at Grosse Pointe, Mich., succeeding S. M. BROWNELL, who leaves August 1 for Yale University.

MARY B. MCANDREW, recently reelected superintendent of schools in Carbondale, Pa., held until recently the distinction of being the only woman superintendent of schools in Pennsylvania until ELIZABETH G. BATTLE of

Films for the School Screen

Astronomy

Galileo's Telescope—Pictures of Galileo and the optic tube, invented by a Dutch spectacle maker, with which, by his observations of the movements of Jupiter and Venus, he proved conclusively the Copernican theory. 1 reel. 16 mm. sound. For rent or for purchase. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York.

Mount Wilson Observatory—In contrast to the crude optic tube of Galileo, the world's largest telescope is shown in operation. The 100 inch Hooker reflector magnifies the power of the eye 160,000 times, making objects that are 19 light years away visible. Sun spots and their size in relation to the earth and solar prominences are shown 150,000 miles high. 1 reel. 16 mm., sound. For rent or for purchase. Walter O. Gutlohn, Inc., 35 West Forty-Fifth Street, New York.

Earth—Latitude and Longitude—How science has divided the earth with imaginary lines to show the hemispheres; latitude and longitude: reckoners of time and means of determining location; locating a burning vessel so that a rescue can be made. 1 reel. 16 mm., sound. For rent or for purchase. Edited Pictures System, Inc., 330 West Forty-Second Street, New York.

Eclipse of the Sun and Tides and the Moon—Animated diagrams illustrating the motions of the sun, moon and earth in relation to one another; animated technical drawings showing the relation of the sun and moon to the tides. 1 reel, 16 and 35 mm., silent. For rent or for purchase. Bray Pictures Corp., 729 Seventh Avenue, New York.

Communing With the Heavens—Telescopes of the Canadian Observatory; astronomers making observations. 1 reel. 16 mm., silent. Loan, except to Pacific Coast states. American Museum of Natural History, Department of Education, Film Division, Seventy-Seventh and Central Park West, New York.

Exploring the Universe—Explanation of refracting and reflecting telescopes; the transformation of the dipper during the next hundred thousand years; binary stars; eclipsing variables; trinary stars; the motion of the stars in the Hyades and the Hercules cluster; apparent star motion resulting from motion of the solar system; galactic rotation; the theory of the expanding universe; animated drawings. 1 reel. 16 and 35 mm., sound. For rent or for purchase. Erpi Classroom Films, Inc., 35-11 Thirty-Fifth Avenue, Long Island City, N. Y.

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Pittston recently was named superintendent in that city. Miss Battle has been senior high school supervising principal.

E. W. JACKSON, principal of David Crockett Junior High School, Beaumont, Tex., for the last fourteen years, has been elected city superintendent. He succeeded M. E. MOORE, retiring superintendent, on July 1. NEWMAN SMITH will be the new principal of David Crockett.

R. O. EVANS, former superintendent of schools at Helena, Mont., became superintendent of schools at Quincy, Ill., July 1, succeeding W. H. LEMMEL, who has been appointed superintendent at Highland Park, Mich.

GLENN RUSSELL, former superintendent of the high school at Raleigh, Miss., has been elected superintendent at Enterprise, Miss.

HETH G. COONS, principal of Bethlehem Central School at Delmar, N. Y., has been appointed superintendent of schools in Amsterdam, N. Y., effective August 1.

W. T. HANES has been elected superintendent of schools at Tahoka, Tex.

J. R. BITNER, superintendent of schools, Fullerton, Neb., was elected president of the Nebraska Schoolmasters' Club recently.

PARKER N. MOULTON of Portland, Conn., has been named superintendent of schools at Wareham, Mass., to succeed BION C. MERRY, who resigned because of ill health.

DR. JOHN H. KINSLEY, assistant superintendent of schools, Albany, N. Y., has been elected president of Vermont Junior College and Montpelier Seminary. Doctor Kinsley is nationally known for his accomplishments in student individual adjustment and guidance.

HARVEY E. SWARTZ has been chosen superintendent of schools, York County, Pennsylvania.

IRA S. BRINSER of Wallingford, Pa., near Philadelphia, has been elected superintendent of schools at Sunbury, Pa.

HARRY CLARK, who has been city superintendent of schools, Knoxville, Tenn., since 1931, was reelected recently for a two year term at his present salary of $5000.

T. WARD GUY has been named superintendent of schools, Iredell County, North Carolina.

C. A. MATHEWSON, principal of the high school at Canonsburg, Pa., for the last nine years, has been chosen to succeed F. W. MCVAY as superintendent of schools for a period of four years.

REED T. GRONINGER, former superintendent of schools, Cass County, Indiana, who is just completing a year as superintendent of schools at Attica, Ind., will become superintendent at Logansport, Ind., August 1, when Supt. W. L. SPROUSE leaves to resume graduate study at Ohio State University. CLYDE CUNNINGHAM will take office August 1 as superintendent at Attica. He has been superintendent at Boswell, Ind.

DR. GUY L. HILLEBOE, principal of Port Chester Junior High School, Port Chester, N. Y., has accepted the posi-

Coming Meetings

July 1-15—Conference of the N.E.A. Department of Elementary School Principals, New York.

Oct. 10-14—National Association of Public School Business Officials.

Oct. 13-15—Vermont Education Association, Burlington.

Oct. 13-15—Utah Education Association, Salt Lake City.

Oct. 19-22—National Council on Schoolhouse Construction, New Capital Hotel, Frankfort, Ky.

Oct. 19-21—New Hampshire State Teachers' Association, Concord.

Oct. 20-22—Wyoming Education Association, Rawlins.

Oct. 26-28—West Virginia State Education Association, Charleston.

Oct. 26-28—North Dakota Education Association, Fargo.

Oct. 27-28—Indiana State Teachers' Association, Indianapolis.

Oct. 27-28—Maine Teachers' Association, Bangor.

Oct. 27-29—Minnesota Education Association, Minneapolis.

Oct. 27-29—Rhode Island Institute of Instruction, Providence.

Oct. 27-29—Montana Education Association, district conventions, Kalispell, Billings, Great Falls and Bozeman.

Oct. 27-29—Colorado Education Association, district conventions, Denver, Pueblo and Grand Junction.

Oct. 28—Connecticut State Teachers' Association, New Haven, Hartford and Bridgeport.

Oct. 28-29—Maryland State Teachers' Association.

Nov. 3-5—Iowa State Teachers' Association, Des Moines.

Nov. 3-4—Arkansas Education Association, Hot Springs or Little Rock.

Nov. 4-5—Kansas State Teachers' Association, Kansas City, Topeka, Salina, Hays, Garden City, Hutchinson, Wichita and Pittsburg.

Nov. 6-12—American Education Week.

Nov. 10-11—Delaware State Education Association, Newark.

Nov. 10-12—New Jersey State Teachers' Association, Atlantic City.

Nov. 16-19—Missouri State Teachers' Association, Kansas City.

Nov. 17-19—Louisiana Teachers Association, Baton Rouge.

Nov. 20-23—South Dakota Education Association, Mitchell.

Nov. 22-25—Virginia Education Association, Richmond.

Nov. 24-26—Texas State Teachers' Association, Dallas.

Nov. 25-26—Idaho Education Association, Boise.

Nov. 25-26—National Council for the Social Studies, Pittsburgh.

Nov. 30-Dec. 3—American Vocational Association, St. Louis.

Feb. 25-March 2—American Association of School Administrators, Cleveland.

tion as superintendent of schools at Rutherford, N. J., to succeed CLARENCE A. FETTERLY.

M. A. HOLMAN, superintendent at Meadville, Mo., has been appointed superintendent of schools at Pattonville, Mo., to succeed C. C. BIRCH.

WALTER C. RICHTER, supervising principal of schools, Myerstown, Pa., was unanimously elected superintendent of schools, Waynesboro, Pa., succeeding DR. D. J. KEENER.

WALTER J. RIDEOUT of Hartland, Me., was elected superintendent of schools at Livermore Falls, Me., recently, succeeding W. H. S. ELLINGWOOD, who will retire.

JAMES T. DOWNIE has been elected superintendent of schools at Punxsutawney, Pa., succeeding FRANK S. JACKSON, who is retiring.

ALEXIS JOHNSON, Newman Grove, Neb., has been appointed superintendent of schools at Leigh, Neb. Among other Nebraskans who have been appointed to new superintendencies are: FRED SCHNABEL, Clearwater, at Chase County High School, Imperial; HENRY FURST, Fremont, at Sunol, and WESLEY MEIERHENRY, Arlington, at Republican City.

DR. ROBERT BROWN, supervising principal of schools, Stroudsburg, Pa., has been elevated to the superintendency.

ELMER DAVENPORT, superintendent of schools in Bloomfield, Conn., became superintendent in Thomaston, Conn., on July 1.

EARL M. HUTCHINSON has been elected superintendent of schools of the district comprising Washburn, Perham and Wade, Me.

ARNETT CROSS, principal of Clinton High School, Clinton, Okla., has been named superintendent of schools in Clinton to succeed GEORGE D. HANN, who resigned after accepting the superintendency of schools at Ardmore, Okla.

CLINTON H. ATWOOD, principal of the high school at Solvay, N. Y., has been elected superintendent of the schools of that village.

DR. WYLIE G. PATE resigned recently as superintendent of schools at Millville, N. J., to accept an offer as superintendent of the Middletown township schools in Monmouth County, New Jersey.

Principals

G. DERWOOD BAKER, principal of South Pasadena Junior High School, South Pasadena, Calif., who was granted a year's leave of absence in March, 1937, to become principal of the junior-senior high school division of Lincoln School, Teachers College, Columbia University, has resigned. Mr. Baker has accepted the principalship of the Fieldston School of the Ethical Culture Society in New York, an experimental six year high school operated along progressive lines. VERLIN SPENCER, who has been serving as acting principal during Mr. Baker's absence, was elected principal.

RAY W. HENRY was elected new high school principal at Duquesne, Pa., and JAMES E. MAGEE was named new principal at the junior high school.

ELIZABETH T. FITZPATRICK, first assistant in biological science at George Washington High School, New York, has been named principal of Bay Ridge High School, Brooklyn, N. Y. ALICE DANAHER, principal of an elementary school, was appointed principal of the new Elizabeth Barrett Browning Junior High School, and MAX SCHONBERG, elementary principal, was chosen head of the new Joseph H. Wade Junior High School.

GEORGE E. SHATTUCK, for the last two years principal of the high school at East Hartford, Conn., and an educator with fifteen years' experience in New England public schools, has been named to succeed HARRY C. FOLSOM as principal of the high school at Greenwich, Conn.

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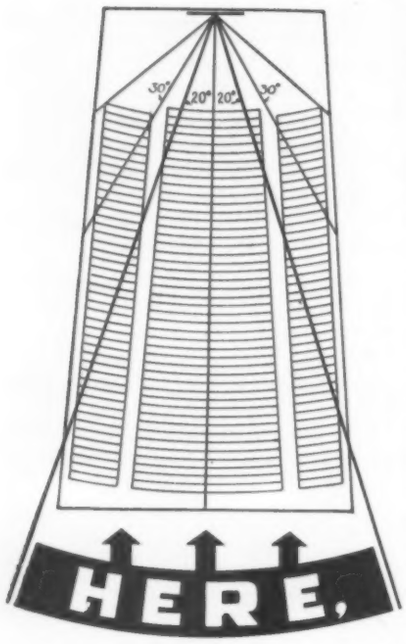

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MILMAN E. PRETTYMAN, principal of the high school at Kennett Square, Pa., for the last eight years, has been elected principal of the Bradford Senior High School, Bradford, Pa.

DR. FRANK D. WHALEN, principal of Elijah D. Clark Junior High School, New York, has been appointed chairman of the teachers' organization which is composed of 75 teachers' associations in the city. DR. ABRAHAM LEFKOWITZ succeeds Doctor Whalen as vice chairman.

MARY FARNSWORTH, assistant principal at Thomas M. Cooley High School, Detroit, will become president of the Detroit Teachers Association, beginning September 1.

H. H. KERSH, principal of the North Central Ward School, Gulfport, Miss., for the last two years, has been elected principal of the Gulfport High School for the coming year to succeed TROY H. PRICE, resigned. WADE OUSLEY, who has been a high school teacher, has been made North Central Ward principal.

F. M. PETERSON, principal of the Monticello Community High School, Monticello, Ill., for the last four years, has accepted the principalship of the high school at Pekin, Ill.

AMY KERMETH has been appointed principal of the Brown School, Schenectady, N. Y., to succeed MARJORIE SIMPSON.

DR. JOSEPH L. LOZO of Lancaster, Pa., has been appointed principal of Wildwood High School, Wildwood, N. J.

In the Colleges

DR. W. E. PEIK, appointed acting dean of the college of education, University of Minnesota, upon the death of DR. M. E. HAGGERTY, has been named dean.

PROF. CHARLES E. RUGH, formerly director of teacher training and now emeritus professor of education, University of California, Berkeley, has been appointed editor of the *California Journal of Secondary Education*.

PROF. E. BLYTHE STASON of the University of Michigan law school faculty has been appointed to the new position of provost of the University of Michigan. The new position will make him an aid to the president.

LLOYD R. STEERE, who has held the combined positions of treasurer and business manager of the University of Chicago, on July 1 was relieved of his duties as business manager under a new plan of the board of trustees separating the two offices. WILLIAM B. HARRELL, assistant business manager, was named business manager.

HOWARD I. DILLINGHAM, who will complete work for the Ph.D. degree in the school of education at Syracuse University this summer, has been appointed dean of the college of business administration of Rider College, Trenton, N. J.

DR. DOAK S. CAMPBELL, since 1934 director of the division of surveys and field studies of the George Peabody College for Teachers, has been named dean of the graduate school of education and also director of the senior college.

DR. M. L. SMITH of Birmingham, Ala., head of the department of religious education of Birmingham-Southern College, has been elected president of Millsaps College, Jackson, Miss.

LOUIS P. BENEZET has accepted a post on the education faculty at Dartmouth College. His successor as superintendent of schools at Manchester, N. H., will be AUSTIN J. GIBBONS, assistant superintendent.

Retirements and Resignations

JENNIE M. ACKERMAN, director of teacher training at the Indiana State Teachers College, Indiana, Pa., will retire at the end of the summer session after thirty-six years of continuous service.

WARD C. MOON has resigned as superintendent of schools at Poughkeepsie, N. Y.

WILLARD O. CHASE retired last month as superintendent of schools in Old Town, Me., after a teaching career of thirty-six years.

ALBERT H. WILCOX, principal of East High School, Rochester, N. Y., has retired at the age of 70 years. WILLIAM C. WOLGAST, vice principal of Benjamin Franklin High School, will succeed him as principal.

A. L. WHITMER resigned as superintendent of schools at Rochester, Ind., recently upon nearing the completion of his thirty-first year there. F. W. RANKIN, principal of the high school, was elected as his successor.

JAMES D. BRANDON, principal of Central High School, Nashville, Tenn., for the last six years, has announced his resignation. He will devote the coming year to work toward a doctor's degree in physical education and school administration or he may accept one of several offers from other educational institutions, he said.

Miscellaneous

ERIC KEBBON, New York architect, has been appointed superintendent of school buildings, design and construction by the New York board of education. HAROLD D. HYNDS, construction engineer, will fill the post of superintendent of plant operation and maintenance. These appointments are

in line with the recent reorganization of the school building bureau which marks the retirement of W. C. MARTIN as executive head of that department.

DWIGHT L. RICH, principal, Lansing Eastern High School, Lansing, Mich., was elected president of the Michigan Schoolmasters' Club recently at the annual meeting in Ann Arbor. ADELINE BALLAMY, Bay City, Mich., was elected vice president; H. A. TAPE, principal, Lincoln Consolidated School, Ypsilanti, secretary-treasurer, and the new member of the executive committee is GEORGE MANNING, Muskegon.

LUDWIG KAPHAN, acting director of high school organization until the post was abolished by the New York City board of education, has been named by the board of superintendents to the newly established position of administrative assistant in the high school division.

HENRY H. WELLES has been named headmaster of the New Canaan Country Day School, New Canaan, Conn., to succeed PHILIP H. THOMAS, who resigned.

LOUISA A. LAWTON, a member of the Ohio State University faculty, is the new principal and superintendent of the Susan Fenimore Cooper Foundation, Inc., Cooperstown, N. Y., and will assume her post August 1.

WALTER EDWARD RILLING, Milwaukee school board auditor since 1933, has been elected acting secretary and business manager of the Milwaukee board of education for one year.

ANNE CUTTER COBURN, principal of Miss Sayward's School at Overbrook, Pa., has been named head of the Hathaway-Brown School, Cleveland, succeeding MARY E. RAYMOND.

Deaths

DR. F. B. DYER, former superintendent of schools in Cincinnati and Boston, died at his home in Cincinnati recently. Doctor Dyer was superintendent of schools in Cincinnati from 1903 to 1912, superintendent in Boston from 1912 to 1918 and first dean of the Teachers College of Miami University. In 1913 he was president of the Department of Superintendence. Upon his retirement from educational work, he was three times elected a member of the Cincinnati board of education for a total of twelve years' service in this capacity.

DR. CHARLES GILMORE MAPHIS, professor of secondary education and dean of the summer quarter, University of Virginia, died suddenly at the age of 73 years. Doctor Maphis won wide recognition as director of the Institute of Public Affairs at the university and also served as a member of the Virginia Education Commission.

FRANK E. ELLSWORTH, for many years director of training schools and placement bureau at Western State Teachers College, Kalamazoo, Mich., died suddenly of heart disease at the age of 65 years.

DR. EMORY W. HUNT, president emeritus of Bucknell University, Lewisburg, Pa., died at the age of 76. Doctor Hunt formerly was president of Denison University, a post which he held from 1902 until 1913. He had been president of Bucknell from 1919 to 1931.

JOHN A. DIEDERICHSEN, 84, the oldest Milwaukee city school principal in years of service when he retired six years ago, died recently. Mr. Diederichsen was principal of the Lloyd Street School for fifty-four years.

NATHAN J. KINGSLEY, former superintendent of schools in Providence, R. I., for thirty-eight years, died recently in Old Greenwich, Conn.

CHARLES AITKENS, vice principal of the Warren Easton Boys' High School, New Orleans, died recently of pneumonia.

STOKES MILTON, superintendent of schools in Mulberry, Ark., died recently from injuries suffered in an automobile accident.

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THE BOOKSHELF

EXPERIENCE AND EDUCATION. *By John Dewey. The Kappa Delta Pi Lecture Series. New York: The MacMillan Company,* 1938. *Pp.* xiii + 116. $1.25.

An attempt to clear some of the fog that now surrounds educational theory, by offering an interpretation of the philosophy of experience and the scientific method; a possible way out of the conflict between traditionalism and progressivism.

MULTIPLE MANAGEMENT. *By Charles P. McCormick. New York: Harper & Brothers,* 1938. *Pp.* xii + 175. $2.

To those who are not convinced of the "practical" possibilities of democratic administration in education, this plainly told story of the experience of some practical business men in group planning should be most instructive.

EMOTION AND THE EDUCATIVE PROCESS. *By Daniel Alfred Prescott. A Report of the Committee on the Relation of Emotion to the Educative Process. Washington, D. C.: American Council on Education,* 1938. *Pp.* xviii + 323. $1.50.

Exploratory study of the relationship of nonintellectual factors in education. A challenging and provocative presentation.

EDUCATIONAL FREEDOM AND DEMOCRACY. *Edited by Harold B. Alberty and Boyd H. Bode. The Second Yearbook of the John Dewey Society. New York: D. Appleton-Century Co., Inc.,* 1938. *Pp.* vii + 292. $2.25.

Timely discussion of pertinent problems, rationally presented. Every administrator should read it.

SPATTER INK TECHNIQUES. *By La Vada Zutter. Chicago: Sanford Manufacturing Company,* 1938. *Pp.* 22. $2 (*Cardboard Cover*).

Full of excellent suggestions to the teacher of fine arts; fascinating to the child with a desire for self-expression.

SELECTION OF TEACHERS IN LARGE CITY SCHOOL SYSTEMS. *By John Coulbourn. Contributions to Education, No.* 740. *New York: Bureau of Publications, Teachers College, Columbia University,* 1938. *Pp.* ix + 177. $1.85.

Good description of practices, with sensible recommendations for betterment.

EPIDEMICS IN SCHOOLS. *By the School Epidemics Committee, Medical Research Council. New York: British Library of Information,* 1938. *Pp.* 289+xiv. $1.40 (*Paper Cover*).

Results of a five year study of epidemics among English school children are analyzed in this impressive study.

YOUTH TELLS ITS STORY. *By Howard M. Bell. Conducted for the American Youth Commission. Washington, D. C.: American Council on Education,* 1938. *Pp.* 273. $1.50 (*Paper Cover*).

In this study of youth attitudes, 13,528 Maryland youth were interviewed. The majority felt wages were too low; 90 per cent believed relief to be a federal problem; they were almost unanimous against child labor; more than two-thirds favored married women working, and a majority believed war was useless but would go if drafted. The main youth problem appears to be one of economic security.

NEVER TO DIE. *The Egyptians in Their Own Words. Selected and Arranged With Commentary by Josephine Mayer and Tom Prideaux. Illustrated. New York: The Viking Press,* 1938. *Pp.* 224. $3.50.

Definite contribution in making available in most readable form the literature of ancient Egypt. Illustrations and fine format make this an unusually fine book both for children and adults.

THE NEGRO COLLEGE GRADUATE. *By Charles S. Johnson. Chapel Hill: The University of North Carolina Press,* 1938. *Pp.* xvii+399. $3.

Study of great import and value in the field of Negro education. Searching and painstaking research in a field of numerous difficulties. Information clearly presented without drawing monumental conclusions.

JOURNEY TO MANAOS. *By Earl Parker Hanson. Illustrated. New York: Reynal & Hitchcock,* 1938. *Pp.* 342. $3.

To those who love the thrill of adventure in strange lands while sitting before the friendly home fires, here is a vivid account by a most rugged individualist of impressions and adventures on a trip through equatorial South America. A meaty book with an unusual tang to it.

FUNDAMENTALS OF EDUCATIONAL PSYCHOLOGY. *By O. B. Douglas and B. F. Holland. New York: The Macmillan Company,* 1938. *Pp.* xv+ 598. $2.50.

Elementary college textbook growing out of the authors' teaching experience and experimentation with these materials over a period of years.

THE DAY NURSERY. *By Ethel S. Beer. New York: E. P. Dutton & Co., Inc.,* 1938. *Pp.* 215. $1.60.

Story of the evolving day nursery from routine care to educational status.

ADMINISTRATION OF TOWN AND VILLAGE SCHOOLS. *By Floyd T. Goodier and William A. Miller. St. Louis: Webster Publishing Company,* 1938. *Pp.* xiv+336. $2.

Administration of the small school system in terms of the superintendent's personal administration. Contains much of immediately practical value to the executive.

HOLY OLD MACKINAW. *A Natural History of the American Lumberjack. By Stewart H. Holbrook. New York: The Macmillan Company,* 1938. *Pp.* viii+278. $2.50.

The trail of the lumberjack from Bangor to the Great Lakes and thence to the Pacific Coast recaptures the color and spirit of a phase in American life. Meaty reading for adults.

THE APACHE INDIANS. *By Frank C. Lockwood. New York: The Macmillan Company,* 1938. *Pp.* xvi+348. $3.50.

Here in strong vivid writing is the history of one of the most noted American Indian tribes, a scholarly yet most readable contribution to history.

THE PSYCHOLOGY OF LEARNING THROUGH EXPERIENCE. *By Henrietta V. Race. Boston: Ginn and Company,* 1938. *Pp.* viii+384. $2.

Combination of principles and procedures in the teaching of educational psychology. It's an elementary text.

PROGRESSIVE EDUCATION AT THE CROSSROADS. *By Boyd H. Bode. New York: Newson & Company,* 1938. *Pp.* 128. $1.

A philosopher looks at progressive education and points out its weaknesses and areas of confusion. An important contribution in clarifying and classifying this movement especially when under heavy conservative fire. Some readers may be disappointed because the philosopher did not go further and make a more concrete offering.

TRAINING IN DEMOCRACY. *The New Schools of Czechoslovakia. By Francis H. Stuerm. Published Under the Auspices of the Progressive Education Association. New York: Inor Publishing Company,* 1938. *Pp.* xiii +256. $2.50.

Fascinating description of the development and operation of a democratic system of education under a strongly centralized system of administration.

Just Off the Press

KIDNAPPED. *The Adventures of David Balfour. By Robert Louis Stevenson. Boston: Bruce Humphries, Inc.,* 1938. *Pp.* x + 255. $0.39.

STORY OF CIVILIZATION. *By Carl L. Becker and Frederic Duncalf. New York: Silver Burdett Company,* 1938. *Pp.* xv + 863 + xix. $2.40.

IMPROVING YOUR READING. *A Class Text in Remedial Reading. By Helen S. S. Wilkinson and Bertha D. Brown. New York: Noble and Noble, Publishers, Inc.,* 1938. *Pp.* xiii + 361. $1.

MODERN-SCHOOL ARITHMETIC: NEW EDITION. *Illustrated. By John R. Clark, Arthur S. Otis, Caroline Hatton and Raleigh Schorling. Yonkers-on-Hudson: World Book Company,* 1938. *Seventh Grade: Pp.* xii+292. $0.76; *Eight Grade: Pp.* xii+308. $0.76.

BIBLIOGRAPHY OF GUAM. *Third Edition. Edited by Charles Frederick Reid and Others. Project No.* 465-97-3-18 *of the United States Works Progress Administration. Sponsored by the College of the City of New York.* 1937. *Pp.* v+37. *(Mimeographed; Paper Cover).*

MARIHUANA. *The New Dangerous Drug. By Frederick T. Merrill. Washington, D. C.: Opium Research Committee, Foreign Policy Association, Inc.,* 1938. *Pp.* 48. $0.15 *(Paper Cover).*

MY BOOK: *For Use With "Surprise Stories";* $0.16; *"New Stories,"* $0.16; *"Best Stories,"* $0.16; *"The New Little Book,"* $0.12, *and "The New Wag and Puff,"* $0.24. *By Marjorie Hardy. Chicago: Wheeler Publishing Company,* 1937. *(Paper Cover).*

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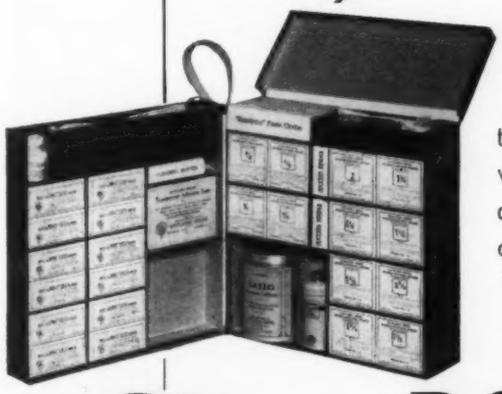

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MYERS-RUCH HIGH SCHOOL PROGRESS TEST, FORM A. *By Charles Everett Myers, Giles M. Ruch and Graham C. Loofbourow. With Manual of Directions, Key and Class Record. Yonkers-on-Hudson: World Book Company,* 1938. *Per Package of* 25 *Sets,* $1.30.

THE ADVENTURES OF OLIVER TWIST. *By Charles Dickens. Boston: Bruce Humphries, Inc.,* 1938. *Pp.* iv + 379. $0.39.

PROBLEMS AND VALUES OF TODAY. *Volume* II. *A Series of Student's Guidebooks for the Study of Contemporary Life. By Eugene Hilton. Illustrations by Ruth Taylor. Boston: Little, Brown and Company,* 1938. *Pp.* xvi + 679. $1.68.

MEN AND OIL. *By Robert B. Weaver. Chicago: The University of Chicago Press,* 1938. *Pp.* 42. $0.25 *(Paper Cover).*

SECOND INTERLINEAR GERMAN READER. *By Meno Spann. Chapel Hill: The University of North Carolina Press,* 1938. *Pp.* 120. $0.75 *(Paper Cover).*

A COMPREHENSIVE TEST PROGRAM. *Manual for Teachers. By William A. McCall and John P. Herring. Pp.* 13. *(Paper Cover). Tests: School Practices Questionnaire. A Test of the Curriculum for Grade Four Through Grade Nine—Form* 1. *By William A. McCall, John P. Herring, and John J. Loftus. Intelligence Test, for Grades* 3 *Through* 9*—Form* 1. *By William A. McCall. Comprehensive Achievement Test for Grades* 3 *Through* 9*—Form* 1. *By William A. McCall and John P. Herring. Educational Background Questionnaire, for Grades* 4 *Through* 9. *By William A. McCall and John P. Herring. New York: Laidlaw Brothers, Inc.,* 1937.

GATES-STRANG HEALTH KNOWLEDGE TEST. *Forms A Through F, for Grades Three Through Twelve. By Arthur I. Gates and Ruth Strang. With Manual of Directions and Answer Keys. New York: Bureau of Publications, Teachers College, Columbia University,* 1938. $3.15 *per Hundred for Each Form;* $25.50 *per Thousand.*

A TEST ON MANNERS FOR JUNIORS. *By Margaret B. Stephenson and Ruth L. Millett. Bloomington, Ill.: McKnight & McKnight,* 1938. *Pp.* 15. $0.10; $5 *per Hundred (Paper Cover).*

HOW DO *You* DO? *By Margaret B. Stephenson and Ruth L. Millett. Illustrations by Helen Strimple. Bloomington, Ill.: McKnight & McKnight,* 1938. *Pp.* 32. $0.25; $15 *per Hundred (Paper Cover).*

THE ADVENTURES OF TOM SAWYER. *By Samuel L. Clemens. Boston: Bruce Humphries, Inc.,* 1938. *Pp.* 251. $0.39.

GEOGRAPHICAL CROSS WORD PUZZLES. *Supplementing Activities in Geography. Edited by George J. Miller. Bloomington, Ill.: McKnight & McKnight,* 1938. *Pp.* 24. $0.15, *With Key,* $0.20; $1.20 *per Dozen (Paper Cover).*

EASTERN CONTINENTS. *A Study of Europe, Africa, Asia and Australia. By Douglas C. Ridgley and George F. Howe. Revised Edition. Bloomington, Ill.: McKnight & McKnight,* 1938. *Pp.* 126. $0.56 *(Paper Cover).*

BEYOND HIGH SCHOOL. *By Margaret E. Bennett and Harold C. Hand. New York: McGraw-Hill Book Company, Inc.,* 1938. *Pp.* xv+227.

ZNIP, ZNAP, AND ZNUP. *A Story About the Zizzorbirds of the Zun. By Frank Wadsworth, Jr. Illustrated by the Author. Boston: Bruce Humphries, Inc.,* 1938. *Pp.* 139. $2.

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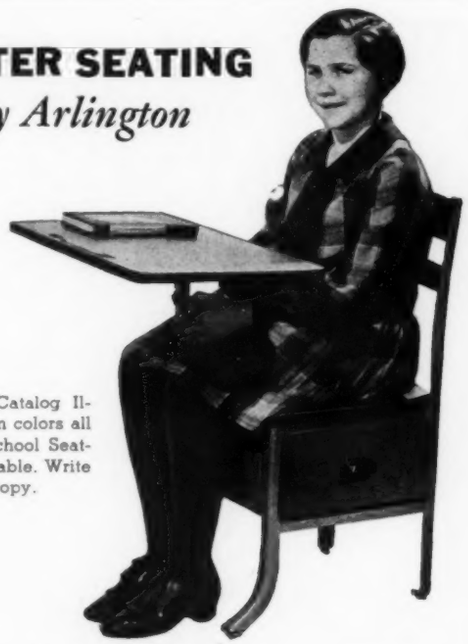

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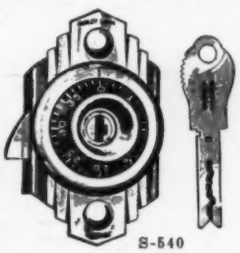
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Generalities

At a meeting of the board of directors of Colt's Patent Fire Arms Mfg. Co., Hartford, Conn., held recently, GEORGE R. PORTER was named vice president in charge of the Autosan Machine Division. Mr. Porter had previously held the position of general manager. He first came to the Colt Company in the capacity of salesman in the Fire Arms Division and was later made purchasing agent. He has been identified with the Autosan division for approximately sixteen years. . . .

Erpi Picture Consultants Incorporated announces that hereafter the organization will be known as ERPI CLASSROOM FILMS INCORPORATED. The change came about through a desire to acquire a trade name that would more adequately describe the company's activities. On April 1 the organization moved into new quarters at 35-11 Thirty-Fifth Avenue, Long Island City, New York. The move makes it possible for the company to carry on all functions, including administration, research, production and distribution at one location. . . . The campaign for better educational facilities through consolidation of schools is the theme of International Harvester's new film, "MODERN EDUCATION AT BEAVERTON CONSOLIDATED SCHOOL." This new one reel sound film takes one into the consolidated school at Beaverton, Mich., for a twelve minute visit with children and teachers. It shows the modern methods and equipment employed, including International school buses for transportation of the children. It is narrated by Truman Bradley, radio commentator, and tells how fifteen one room schools in Gladwin County, Michigan, were consolidated into a modern school with an attendance of 700 pupils. The entire action takes place at Beaverton and the grade and high school pupils are the actors.

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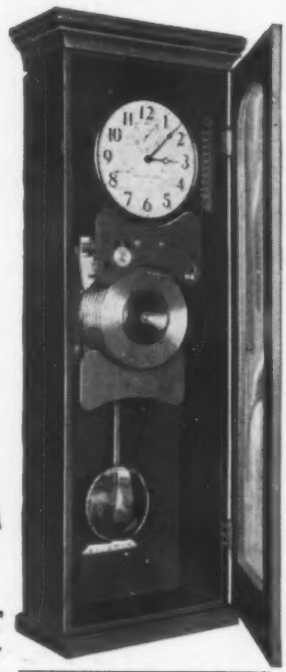

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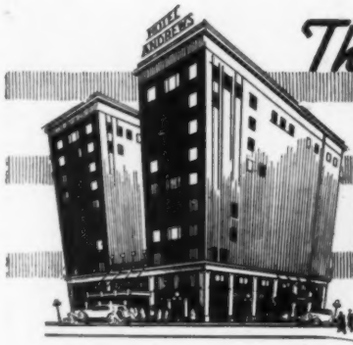

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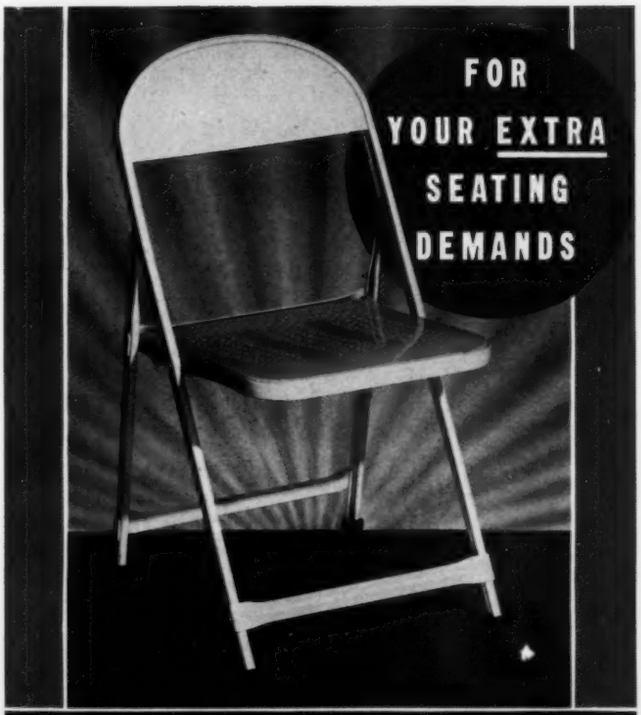

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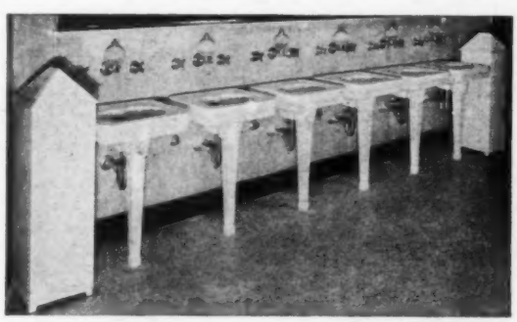

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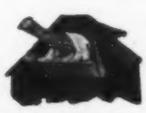

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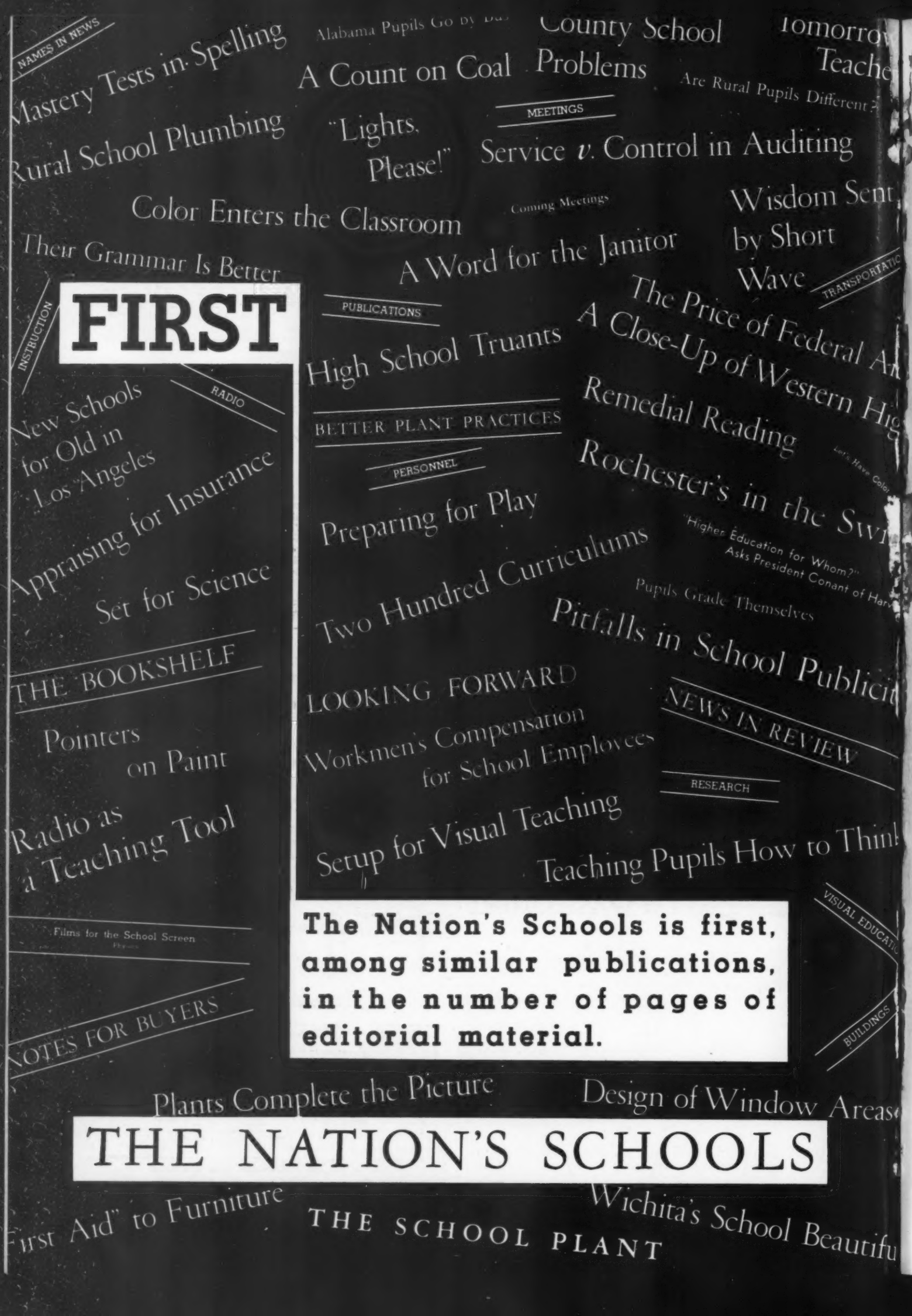
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THERE is an element of surprise to many persons in the discovery that the largest amount of new school construction is going on in towns of 2500 or less. A recent survey made by The NATION'S SCHOOLS establishes this fact.

Appropriate to this condition will be the presentation in the September issue of a portfolio of small school plans and descriptions. One elementary school in South Dakota, Louisiana, Pennsylvania and Washington has been selected as somewhat representative of the trend in small school architecture in North, South, East and West.

THE Chicago Fair of 1893, whether for weal or woe, influenced American architecture for several decades. Similarly its Century of Progress Exposition in 1933 set a style, which has been refined and elaborated by subsequent and projected expositions in Paris, New York and San Francisco; an important element in this modern style is color.

On page 54 of this issue is an account of the use of color on the exterior walls of the school buildings in Santa Monica, Calif. Next month's contribution to this magazine's current campaign to bring more zest and color into drab schoolhouses concerns the cafeteria. It applies particularly to those basement or dungeon lunchrooms in the older type of building, where eating is relegated to the only area not in use for instructional or engineering purposes.

Dr. Emily Davis of Brookings, S. D., has done the article, and her text and illustrations will make the principal and cafeteria manager race for paint brush and sewing machine. Both tools

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are needed for the job they will be inspired to do.

THIS magazine has an aversion to "weeks," which it has been impolite enough never to conceal. For next month's issue, however, a "week" has slipped boldly by the Big Blue Pencil. In Ellwood City, Pa., the high school guidance department put on an Ellwood City Industries Week as a project in vocational education. Pupils were put in personal contact through lectures, interviews and exhibits with the local industries they probably will enter after they leave school. The guidance counselor, Arthur D. Webster, will describe what went on during the week and the end-results.

HOW the Detroit Board of Education hires and administers its noneducational personnel will be told next month by MARY M. CAROTHERS, assistant in the personnel department. Of 11,011 school board employes 3287 are listed in the foregoing classification. Procedures have been set up within the last few years for the choice and placement of all noncontract personnel. Included are clerical workers, employes in building operation and maintenance, lunchroom managers, bath and bus attendants, matrons and domestics.

VARIOUS spokesmen have had their say on the matter of free rides for parochial pupils, the current controversy in New York State and, indeed, the country over. M. M. Chambers, specialist in school law, will next month bring his interpretation of the question. His viewpoint, as usual, is judicious and at the same time forward looking.

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LOOKING FORWARD

The Tail Wags the Dog

THE mortality of small city school superintendents who interfered in some way with the programs and plans of secondary school football coaches appears to have been unusually high during the last academic year. If the reports received from three states hold true throughout the country, this problem is worthy of serious study.

While the incidents reported differ with respect to details, the general problem is the same in each case. In one situation, the board of education decided to bring balance to its activity program by placing at least as much emphasis on orchestral and band music as on football. The coach refused to be de-emphasized or retired and stirred up community feeling to such an extent that the superintendent was forced to resign.

In another case the superintendent recommended the dismissal of an incompetent coach whose influence was not of the best, with the resultant whipping up of community emotion that kept the coach and discharged the superintendent. A third type was a case in which the coach was judged incompetent because of age and was dismissed. Within a week the coach was back on the job and the superintendent was looking for another position.

The reason for the apparent inability of the small community to keep its athletic program within bounds is easy to ascertain. Competitive athletics have been emphasized all out of proportion to their value and their curricular balance. Strong emotions have been aroused with the acceptance of the championship cult. Chambers of commerce, alumni of colleges and universities, business men's clubs and small town poolroom interests have been enlisted around the idea of the value of a winning team. As a result coaches in too many cases have become the bullies of the school, demanding special favors for the athletes, insisting that teachers pass them even in cases of obvious failure. There are instances on record where they have coerced principals into reversing the verdicts of the teacher by changing records. Many of these coaches, in addition to their regular salaries, are openly subsidized by voluntary community groups so that morale among the rest of the teachers is obviously lowered. In the small town it may be said truthfully that competitive athletics dominate the educational program.

The remedy is not simple. Having built a Frankenstein, it is impossible through a sudden access of virtue and vision to change matters. The return to rationalism and balance can be made only through a process of gradual deflation of the championship cult, a progressive return to sanity. Discharging the coach is no remedy. In fact, the reaction is liable to build a greater emotional protection around that individual. For those superintendents and principals who are faced with the solution of this problem, a long-time policy to be gradually achieved appears to be the only solution. The organized teaching profession also can make its influence felt in no small way by taking a definite stand against the over-emphasis of athletics and the irrational importance of the coach.

An Opportunity

THE need for a clear-cut statement of the value of education in a democracy caused the Educational Policies Commission to have Charles A. Beard write a monograph entitled "The Unique Function of Education in American Democracy," which was published in most attractive format in 1937. The Beard presentation is an outstanding piece of work both in concept and in execution.

Despite the value of this document in social interpretation with parents and lay leaders, the teaching profession has been apathetic in its attitude. Up to the present time only a few more than 20,000 copies have been put into circulation. One state accounted for 5000 of this number. If the teaching profession in the other 47 states had displayed the same enthusiasm, the circulation would have jumped to more than a quarter of a million copies.

Too frequently complaints are heard that the layman does not understand the purpose or value of education. Yet when opportunity is offered to assist in some measure in overcoming this difficulty little interest is displayed. It is not yet too late to remedy this neglect. If every superintendent and principal would hold themselves responsible for distribution of at least ten copies to lay leaders in their community, it might

have a noticeable effect in arousing public opinion.

However, it is not sufficient merely to distribute this book. It should be studied and interpreted through adult groups. The Beard report might well be made the program of the parent-teacher association for two or three meetings next fall. Other women's discussion groups might be induced to study this most important problem. With the possibility of the schools passing into another twilight zone as a result of the secondary depression, unusual effort will be needed by the opening of the new academic year to maintain a dynamic public opinion toward public education. The Beard monograph offers an interpretive opportunity that should not be neglected.

Questions and Answers: III

TWO major controversies have been aroused over the report of the President's Advisory Committee on Education. The first of these is the wide difference of opinion between those who would forego federal aid entirely because of the obvious dangers of control and domination, and the second much more emotional issue is over the recommendation that the individual states be permitted to determine whether federal monies, resulting from the possible enactment into law of these recommendations, shall be allocated for the purchase of reading materials, transportation, scholarships, health and welfare services to children regardless of whether they are enrolled in public or private schools. Since the majority of elementary and secondary private schools are sectarian in character, a religious issue has been injected into the discussion.

Statements made and letters received raise the direct question of whether the Advisory Committee on Education was attempting to destroy the public school, bring church and state into official relationships, or to subsidize religion directly.

The committee obviously was trying to do none of these things but rather, through the objective study of certain broad problems of education, to offer suggestions and recommendations looking forward to their possible solution. It is unfortunate that in the heat engendered by this clash of opinion, other recommendations that are part of the whole were overlooked.

As stated earlier in these discussions, there was a definite feeling on the part of the majority of the committee that the dangers of federal domination and progressive control were so great that a series of qualifying principles was adopted to safeguard local and state control of education. One of these was the desire to prevent the federal government from dictating to the states. The only exception to this principle in the report was insistence on an equal sharing of aid by Negro schools. Since no federal statute to the contrary exists and since the decision of the United States Supreme Court in the Louisiana case created a legal precedent, the committee simply recommended that each state be permitted to determine its program for use of these funds.

To obtain a proper perspective upon this much belabored recommendation, it is necessary to consider it in relation to two other related recommendations that have escaped notice. These three, briefly, are:

1. The state may determine the allocation of federal funds for the purchase of reading materials, transportation, scholarships, health and welfare services to nonpublic as well as public school children (page 86).

2. The fund recommended for cooperative educational research, demonstration and planning may be allocated to both public and nonpublic nonprofit institutions or agencies as determined by the Office of Education (page 192).

3. The grants for educational services to adults are not to be restricted to expenditure through the public schools but should be available through the extension services of colleges and universities and through other appropriate nonprofit educational agencies (page 211).

It apparently was the feeling of the committee that the broadest possible use should be made of research facilities regardless of the nature of the institution; that considerable freedom should be allowed in the adult education area to prevent too rigid institutionalization and control of program, and that in the case of the public schools there had in recent years been added a series of services that might be considered as auxiliary to the direct instructional program. Among these may be included health inspection, guidance and welfare, transportation and scholarships. Textbooks and reading material were probably included on the basis of the Louisiana decision. Since the individual committee members were not polled specifically on all of the items included in the first recommendation of the three previously presented, it is impossible to determine what the individual attitude was.

While it was probably anticipated that if the states received these federal grants and passed legislation favoring the sharing of these funds, the child in elementary and secondary sectarian schools might be the the chief recipient of favors, it is also obvious that the intent of the second recommendation was to include all institutions of higher learning capable of rendering service to the nation and that the idea of subsidizing interest groups, like labor, in developing adult education within their own groups was an intent of the third recommendation.

It is undoubtedly true that these recommendations, considered together as a group, indicate the support by the Advisory Committee on Education of fundamental changes in the current educational policies. Since the report of the committee and possible legislation accruing from it are two distinct aspects, it seems that the chief value of the committee recommenda-

tions in these areas was to bring the entire question into the open where it might be discussed and a public opinion formed either in favor of or against it. It certainly was not the belief of all members of the committee that these and other recommendations were to be accepted completely and rushed into legal enactment without opportunity for the crystallization of a definite public opinion respecting their desirability. It is definitely desirable that all of the fundamental changes be considered instead of bringing all publicity to bear on just one phase and thus distorting opinion.

It certainly appears that the theory of the committee in presenting these and other recommendations for public scrutiny and discussion will have the desired democratic effect of making them definitely an issue to be accepted or rejected after mature consideration, in accord with the will of the people.

For Better Teachers

IN A report recently made to the American Psychiatric Association, Dr. Sara Geiger, Milwaukee psychiatrist, placed much of the blame for juvenile delinquency directly upon the school. The school is only one of a series of agencies responsible for education and cannot carry the total responsibility any more than it can carry the total burden.

While it is comparatively easy to make sweeping generalizations of this type, yet some of the reasons advanced by Doctor Geiger for her startling conclusions merit serious consideration. She claims that teaching as a profession is too frequently entered because an individual does not know what else to do and because professional progress can be made more rapidly than in parallel professions. Inadequate education of the prospective teacher was offered as another reason.

As a remedy, Doctor Geiger suggested that teacher training institutions place more emphasis on such subjects as normal, abnormal and clinical psychology, sociology, anthropology, social service, sex education, psychiatry and mental hygiene. In addition to understanding and sympathy derived from deeper knowledge, Doctor Geiger also believes that greater curricular flexibility is required to care for the atypical, retarded, dull, normal and gifted pupils. She agrees with the educational psychologists that early diagnosis is essential and that "recognition of abilities, disabilities and limitations, both physical and intellectual and in personality, must take place in nursery school, kindergarten or early grades if the school is to diagnose and treat its problems intelligently."

Without accepting the much too sweeping generalization that the school is "the actual cause of juvenile delinquency," there is still much merit in the criticism of teacher training, teachers and the school in Doctor Geiger's arraignment. Time ordinarily spent in an attempt to refute a generalization might in this instance be used to much better advantage by both training institutions and the schools to study their programs and to see what progressive changes are possible for the gradual improvement of conditions which educational authorities frequently have pointed out.

Centralized Control

THE manner in which Czechoslovakia has achieved in less than one generation a striking system of democratic public education has been interestingly told by Francis H. Stuerm in a recent monograph, "Training in Democracy." This favorable account shows how the central government was able to provide for democratic training in the schools in a manner that stands out sharply in contrast with its neighbors in Germany, Italy and Russia. Some enthusiasts for the value of strong central control believe that this experience has values to the United States.

In the first place generalization of experience in other cultures is extremely dangerous and not always profitable. Czechoslovakia is a relatively small country. If comparison is to be made at all, it probably should be between this country and one of the forty-eight states.

The school system of this Czech democracy is new. The government had a specific objective and has apparently made some progress toward its outlined goal within a relatively short time. However, as these schools grow in years, it is possible that the elasticity of their youth will be congealed in the static bureaucratic age. Those things do happen. There is little historical evidence to support the theory of continued flexibility in centralized educational organization. It is extremely doubtful whether the Czech experience with centralization has much implication for the United States.

For Greater Understanding

THE teaching profession in the United States as a whole suffers from too narrow an outlook upon educational matters. Local demands upon the teacher's and administrator's time definitely limit extensive reading of educational tendencies and developments in other countries. It is even difficult to keep abreast of current domestic publications. The World Federation of Education Associations has realized this condition and now offers to the teaching profession an opportunity to become familiar with educational developments in other countries through *World Education*, a digest that will be issued every other month during the next year. If a sufficient demand develops, it will be issued ten times a year. The publication provides for a definite professional need and merits the support of the teaching profession.

The Editor

Progress Follows Consolidation

CHARLES H. SKIDMORE

Higher education at the oldest state university west of the Missouri River, the University of Utah. Views are of the campus and administration building.

UTAH has only forty school districts. In twenty-two of its twenty-nine counties these are coextensive with the counties. In the remaining seven counties there are from two to four districts, including five independent city districts. How Utah came to have so few districts may be of special interest in many states in which efforts are now being made to reorganize existing districts. The progress of school service promoted through consolidation should be of equal interest.

The pioneer schools of Utah were similar to those of other states at the beginning. A military tent and a willow cabin were used as schools at first. Then came in succession the larger schoolhouses made of logs, rock, adobe and native lumber, with three village school trustees in charge of small districts. For a long time there were about as many school officials in Utah as there were teachers. Even country towns of from 1500 to 2000 persons had three or four schoolhouses distributed less than a mile apart.

As early as 1890 Salt Lake City saw the advantages of consolidation and reorganized its several districts under

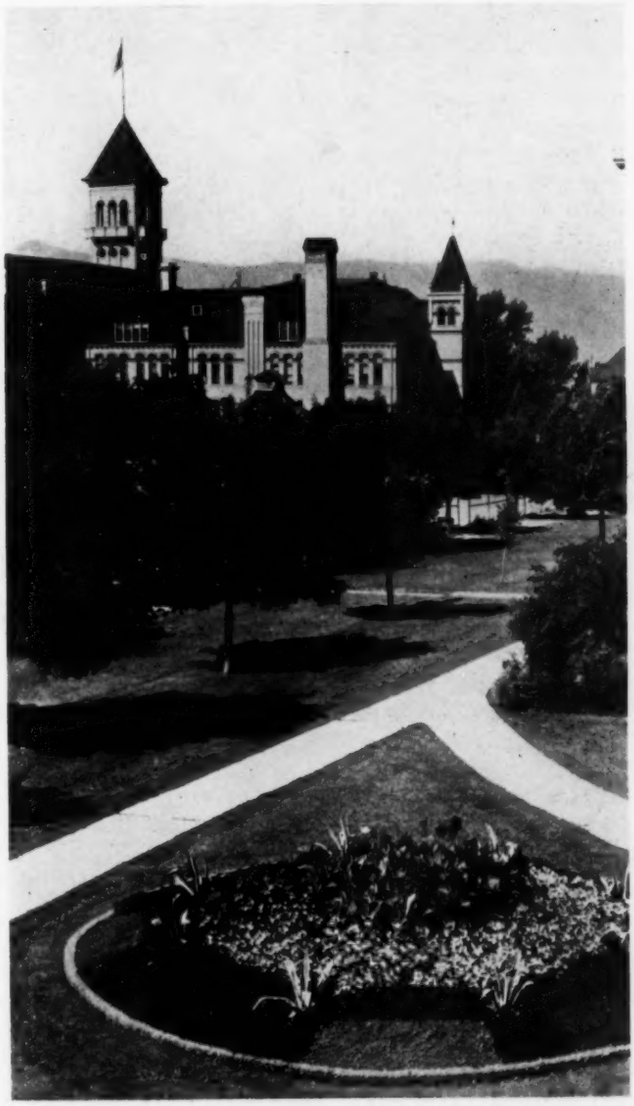
Ogden's new million dollar high school, built in 1937.

one school board. Its action influenced other cities and rural sections of the state favorably. The commissioners of Salt Lake County were the first county commissioners to act. On Dec. 15, 1904, they resolved to consolidate the schools.

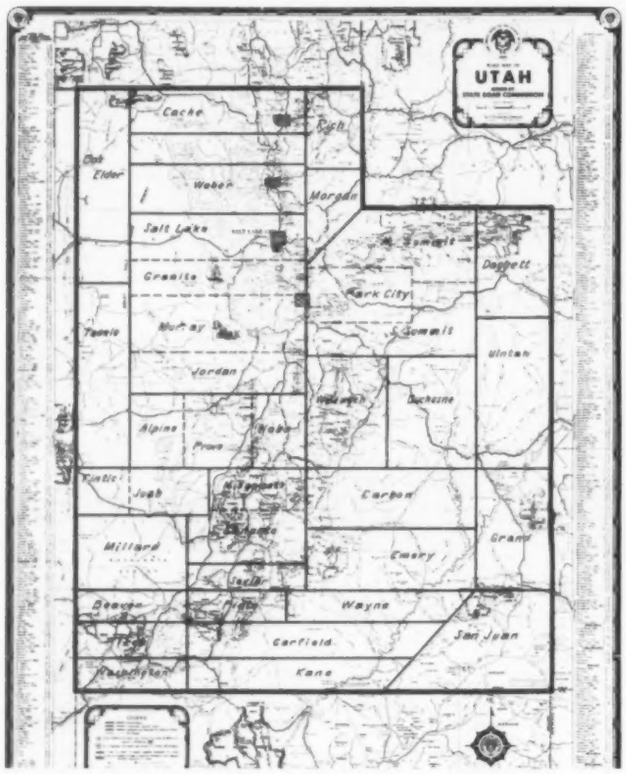
The state legislature of 1905 passed laws, effective on July 3, 1905, authorizing county commissioners to create consolidated school districts at their option. The two largest counties, Salt Lake and Weber, consolidated schools immediately. Several other counties followed this example within a few years. Consolidation had become so popular with school leaders and legislators that, in 1915, the Utah legislature made consolidation compulsory in every county of the state.

Marked progress followed consolidation. New central buildings replaced old ones.

The accompanying table shows how, from 1907 until 1921, under consolidation, the schools advanced in Box Elder School District, which is nearly as large in area as the state of Massachusetts. Comparisons of progress, it will be noted, were made in 1921, covering fourteen years, a period sufficiently long to test the effects of consolidation. These comparisons show that during the first fourteen years of consolidation, while the population in the district had increased only 50 per cent, the average daily attendance in school increased 82 per cent. The increases in at-



The main building at Utah State Agricultural College, Logan, and an enticing stretch of the campus.



Utah has only 40 school districts and 22 of them comprise entire counties. The broken lines indicate the counties in which there are two or more districts. To aid the reorganization process the Utah legislature made consolidation obligatory in 1915.

tendance were noticeable in the upper grades.

The total promotions in all grades increased more than 100 per cent; in the eighth grade, more than 200 per cent, and in the ninth grade, more than 500 per cent.

Compulsory attendance laws induced through consolidation, which required attendance up to the eighteenth year (passed in 1919), assisted materially on the high school level. Nearly all pupils of high school age responded willingly to this legal requirement and decided to remain in school until the end of the senior year.

But statistics do not always tell the whole story. The 68 high school graduates of 1921 shown in the last line of the table were from the Box Elder High School, the only four year high school in Box Elder County District at that time. In two more years, however, in this same district, the Bear River High School had sprung into existence on a farm in the open country to which came pupils from a dozen string-towns of the Bear River Valley. This school also graduated senior high school pupils. As a consequence the number of high school graduates for the Box Elder District was more than doubled from the year 1921 to the year 1923 and trebled from 1921 to 1926.

The two high schools, 22 miles apart, are the only high schools in an area, 80 by 100 miles. Because of an excellent system of school transportation and fair rental allowances for pupils coming from the most remote parts of the district, it has not been necessary or desirable to establish more than two high schools. More than one-half of the high school pupils are transported on bus routes from 2½ to 25 miles in length. One high school bus meanders through a large valley picking up pupils from their farm homes for a distance of 40 miles. The highway is in first-class condition and the bus is the latest model.

The history of the Bear River High School demonstrates that a new high school can be started in the center of a farm area of 25 by 35 miles. A freshman class beginning there with only 40 pupils will increase more than a dozen additional pupils each successive year and come out on graduation day with at least 80 graduates, that is to say, with twice the number with which it began.

The growth of the schools of Box Elder District under consolidation is typical of the growth of the schools in the 40 districts of the state. It explains in great part how Utah has attained high rank on the secondary level. Dr. H. P. Rainey of the American Council on Education says:

"Our democratic philosophy of education has committed us to the principle of providing an education at public expense to each American youth. It is true that this commitment has not been completely fulfilled. Yet at the present time, for the country as a whole, approximately 65 per cent of the high school population from 14 to 18 years of age is enrolled in school. Conversely this means that 35 per cent of the high school population is not enrolled in high school. It is also significant that there is a wide variation among the states with respect to this percentage of pupils of high school age enrolled in school. These facts for a number of the states are worth noting.

"In Alabama the percentage is 28; Arkansas, 33.5; Mississippi, 35.7; South Carolina, 35.8; Illinois, 62.7; Ohio 68.7; New York, 72.9; Massachusetts, 74.1; California, 85.8; Nevada, 86.3; Wyoming, 86.6; Washington, 90.8, and Utah, 95.6."

Another consolidated district with nearly the same number of pupils as the Box Elder District, which is made up of a less homogeneous class of patrons is the Carbon School District. This district is about 25 by 50 miles in area. It lies more than 100 miles

How Schools of Box Elder District, Utah, Advanced Under Consolidation From 1907 Until 1921

	At Consolidation in 1907	*1921*	*Per Cent Increases*
Census, 6 to 18 years	3830	5747	50
Average daily attendance	2601	4735	82
Per cent census in daily attendance	68	82	21
Enrolled, grades 9 to 12	63	865	1273
Total promotions	2375	4910	106
Eighth grade promotions	135	428	202
Ninth grade promotions	63	432	585
High school graduates	0	68	[All]

to the southeast of Salt Lake City, the business center of the state. Its principal business is coal mining and, because of this, its population fluctuates. A large part of its population comes from many states and foreign countries. The farm population, which is comparatively small, changes little.

Through the efforts of a progressive board of education the Carbon District has nearly kept pace with districts with a more permanent and more homogeneous population. This is evidenced by the fact that nearly 90 per cent of its total school census (from 6 to 18 years) is in average daily attendance. The schools have been under good supervision. First-class school buses have been used and a beautiful high school was erected at Price, the county seat, some time ago.

At this time a new state junior college, to cost $270,000, is being erected at Price. It will, in practice, be part of the secondary school system.

The Utah legislature in 1937 created the junior college and appropriated $150,000 toward a P.W.A. contract for the erection of buildings. The city of Price donated an 18 acre site and additional funds were appropriated from the state treasury for beginning the school in September 1938.

The Carbon County school board is erecting and preparing two other buildings on its grounds, which join the new college campus. A contract between the state board of education and the Carbon school board makes it possible to begin this junior college as a four year institution, on the 6-4-4 plan. Buildings on the state campus and the campus of the local school board will be used jointly by the four year institution.

High school graduates from any of the schools of eastern Utah will be received. There is no charge against the local district for running the junior college. This is the same as it is with the lower division of the Utah State Agricultural College and the University of Utah. Appropriations from the state treasury in each case will be supplemented by student tuitions, which are uniform in all junior colleges of the state.

In passing it might be appropriate to say that junior colleges in other rural centers most likely would have been created long ago by the state had it not been for the prominent part the Church of Jesus Christ of Latter-Day Saints has taken in education in Utah. It always has supported the school consolidation plan and has led in a movement for extending the high schools upward. For a number of years it added private academies and colleges in the several large communities at its own expense. As time went on there was a call from the people for more of them, but the depression came also, which made these colleges a heavy financial drain on the church.

The church encouraged the legislators to create a state junior college system and to relieve it of further responsibility in that field. By legislative enactment one such state junior college was begun in 1932 and two more in 1933. The church made a free gift to the state of buildings and grounds for this purpose, which amounted in value to about a million dollars. This made it easy to begin

Restrained landscaping enhances the four buildings of the Bear River High School, made possible through the consolidation of many small schools.

Foothills of the Rockies loom behind the student commons and home economics units and engineering building at Utah State Agricultural College.

One day's travel from Salt Lake City is Bryce Canyon, its thousands of fantastic pinnacles a blaze of color that changes with every light and shadow.

to establish state junior colleges. The new Carbon College is the first to be established on a new campus.

These colleges are under the management of the state board of education, which has a local advisory board at each college. Each one provides professional and terminal courses and is open to adults as well as to recent high school graduates. Thus, the local school system has been enlarged to include two more years.

The story of consolidation would be incomplete if a brief statement were not made with regard to the organization of the 40 school boards and also the state board of education. After December 1938 (with the exception of the Salt Lake City board), each district board will consist of five members to be elected at nonpartisan school elections held a month later than general elections. One board member only is elected each year for a term of five years. Each board becomes a body corporate to do "all things needful for the welfare of the schools." It appoints a superintendent and such assistants and teachers as are necessary and desirable.

From the beginning the local boards have had numerous problems to deal with in eliminating small schools and in financing the erection of modern central buildings in their place. It has been a slow but steady successful process of school progress in Utah. This progress has been best accomplished by stimulating favorable sentiment for it in various communities in advance of official action of the boards of education. Consolidation, as it has been brought about and developed through the years, has been so successful that in not one of the hundreds of consolidations in Utah has there been a persistent desire to return to the old system. On the contrary, the patrons throughout the state generally are proud of the progress made by means of this plan of organization and administration of their schools.

The state board of education always has supported local boards in the reorganization of their schools. The state board is free from political or religious domination. Its personnel includes the state superintendent of public instruction and nine board members appointed by regional conventions of local school board members, only one of which is held each year. For convenience, the state has used the existing seven judicial districts for these regional conventions. The term of office of each member is seven years. Only one member is elected each year, except in the Salt Lake City regional convention, which because of its large population, has three members elected every seven years. The state board of education has general direction of the public school system of the state and particular direction of the state junior colleges.

Appointments to fill vacancies on the board are for unexpired terms only. "In making such appointments the governor shall give consideration only to the merits and fitness of appointees and appointments shall be made irrespective of occupation, party affiliation, religion or sex."

The Granite District report of 1914 claimed fifty advantages for the plan of consolidation as it is organized in Utah. Among these claims were such items as economic management; freedom from political interference; equalization of tax burdens; equalization of school offerings; more efficient board members, school administrators and teachers; specialization of instruction; increase in size of graduating classes; establishment of high schools and junior colleges, and the establishment of vitalizing educational and social centers where all the people, at least in part, may assemble and participate.

True, many of these accomplishments may be realized in selected centers or townships not operating under the county or semicounty unit organization, but the question at once arises: What happens to the parts of the state not thus consolidated? The story of the condition of these is a sad one indeed.

It was my pleasure a few years ago to examine the total yearly expenditures and school offerings of Utah and a neighboring state of similar conditions and like size but which had 1300 school districts to Utah's mere 40. It had 750 one room schools compared with only 90 in Utah at that time. Utah had 10 per cent more of the children of the school census in school for a longer school year than its neighbor. The bonded indebtedness of the neighboring state was 31 per cent higher and the cost per pupil per year for education was 27 per cent higher than in Utah. And, furthermore, the salaries of teachers in Utah, which were far too low, were 22 per cent higher than the average salaries in the neighboring state.

No Special Teachers

DONALD Z. TERHUNE

THE wisdom of an adage of the American Indian, "Never condemn a man unless you have walked a mile in his moccasins," can be applied in the everyday relations between the so-called regular and special teachers in the average school system.

Apparently there is little unanimity as to just what is meant by a special teacher. We may arbitrarily classify special teachers into three groups: (1) teachers of abnormal, backward and handicapped children; (2) teachers who travel from one school to another doing a particular kind of work; (3) teachers who in the main are located in one building under one principal but who teach subjects that are somewhat young and novel in the curriculum and, therefore, have not as yet been accepted as orthodox by the teaching body as a whole.

It is with this third group of special teachers that this discussion is concerned. There are naturally some overlapping of duties between individuals in these groups and a tendency toward combining groups 2 and 3. In the third group are the teachers of music, arts, industrial arts, homemaking, trade courses, vocational agriculture and physical education, the school nurses and the dental hygienists.

Here is a large group that is an integral part of our school staff, yet in all too many cases it has been only partially assimilated and accepted by the teaching staff as a whole. The situation has been largely overlooked by many busy school administrators, although it is fraught with friction and misunderstanding and is certain to prevent maximum coordinated faculty accomplishment.

Many regular teachers regard the special teacher not only with distrust but with derision. On the other hand, the educational training of many special teachers is narrow and their point of view is likely to reflect their training. They are inclined to overestimate the place and value of their subjects in the educational program of the school. Each teacher group works to protect its own interests at the expense of the school and of the pupils.

The causes back of this unhealthy situation may be enumerated: (1) many of the older teachers lack sympathy with the objectives of an enriched curriculum; (2) most teachers are entirely unaware of what their fellow teachers are doing; (3) there is a variation in the salaries paid some special teachers and those paid other teachers; (4) exceptions, privileges and flexibility of action are allowed special teachers because of their so-called out-of-class and out-of-school duties; (5) there is often a lack of supervision of special teachers by school administrators.

Some of the older teachers, figuratively speaking, will continue to be subject-matter minded. Their environment has changed too rapidly for them to keep pace with it. The busy modern teacher can hardly be expected to become well acquainted with the other fellow's work, but at least he can be open-minded and tolerant. A great many regular teachers are striving constantly for an understanding point of view on the school picture as a whole. It takes only a set minority to cause trouble and to spread discontent.

The salaries of special teachers sometimes vary from those of other teachers, although they are by no means always higher, depending on such factors as supply and demand, term of yearly service required and community interest and attitude. Physical education instructors, for instance, often receive greater financial compensation than English teachers in the same school. These instructors not only teach but also usually coach interscholastic athletics and often are placed in charge of the school playgrounds.

Many special teachers are allowed privileges that cause ill feeling between them and their fellow workers. The teacher of music may be exempt from a homeroom or have no register to keep. The teacher of agriculture is occasionally away on all-day field trips and his pupils are absent from other classes. When special programs or exhibits are being prepared, pupils are sometimes excused temporarily from regular classes.

Commonly, special teachers are excused from attending faculty meetings, which tends to separate them from other members of the regular teaching staff. In other cases special teachers, having no homerooms, are allowed considerable freedom during free periods, which may be abused in some cases.

Finally, special teachers are usually poorly supervised. The blame is not entirely on the administrator or his supervisors. He generally feels that the special teacher is working in a field with which he as an administrator is not fundamentally familiar, that the methods peculiar to that field have been mastered by the

In the new and broad outlook on the curriculum, one subject and one service to the child are as important as another; there are no special subjects; there are no special teachers. These are the conclusions drawn by the vocational agriculture instructor at the Bethlehem Central Schools located at Delmar, N. Y.

teacher and that he as an administrator can contribute little as a supervisor.

This unfortunately, is not likely to be the case, especially with new and inexperienced teachers. If the principal is experienced and tactful, he can contribute much to improve the teaching efficiency of every beginning teacher on his staff.

The improving of regular-special teacher relationships is largely an administrative problem. In the interests of a unified and cooperatively minded faculty, the administrator must do all that is within his power to bring about a better understanding among his teachers. There are a number of things that he definitely can do.

1. He can discourage the use of the term "special teacher." When properly integrated into the program of the school, all special teachers are regular teachers; the sooner they are recognized as such, the more useful they will become to the school.

2. He can develop among his teachers the spirit of a common purpose dominating the educational program of the entire school and having as its focal point the continued upward growth and development of every pupil, regardless of his scholastic status.

3. He can correlate the subject matter of the various subjects, such as English and homemaking, to break down the distinction that separates one subject from another.

4. He can have a definite understanding with every teacher as to his duties and responsibilities in relation to the school and to his fellow teachers.

5. He can encourage faculty sociability, both in and out of school hours.

6. He can familiarize himself with the state department regulations governing the conduct of all teaching work in his school with which he is not already familiar.

7. He can visit other schools in which courses similar to those in his own school are given and attempt to become better acquainted with methods used in teaching these courses.

8. He can supervise the work of all teachers, whenever it is indicated that supervision is needed.

9. He can require teachers to file yearly or semiyearly courses of study and weekly lesson plans so that he can study these plans.

10. He can require every teacher to have a homeroom so that all the teachers will have opportunity for broader contacts with the student body.

11. He can require all teachers to attend regular faculty meetings.

12. He can have the board of education require, as a prerequisite to salary increases and advancement, the completion of some courses in the philosophy of education, educational and child psychology, tendencies in education, and educational and vocational guidance.

In these ways and many others, the school administrator can do away with special teachers as a class.

The public school of today is the social institution that is entrusted with the responsibility for taking care of all of the children of all of the people. Since this is the case, the liberalized and enriched curriculum is here to stay, for it is only this type of curriculum that can offer adequate, suitable educational instruction for all people of school age. In this new and broader outlook on the curriculum, all subjects and all services to the child are equally important. There really are no special subjects. All subjects are a regular part of the new curriculum. Therefore, there are no special teachers. All teachers should work intelligently together for the good of the schools and for the advancement of their profession.

Drill Ground for Citizenship

VIRGIL STINEBAUGH

THE most definite preparation for life in a democracy is living in a democracy. The best opportunity for citizenship training in the high school is to make each hour of the pupil's life in that school a laboratory period for training in good citizenship.

In the classroom, in the assembly, in the corridors or on the campus, in the club or on the athletic field, boys and girls are living as members of social groups, large and small, and are facing problems of civic conduct which are similar and in many cases identical with the problems faced by adults.

If the school is properly organized and administered, every social situation will be considered as an opportunity to help pupils form desirable habits of social conduct.

The whole school program must be built on the principle that the high school is a suitable drill ground for life in a democracy. The school curriculum, the disciplinary policies and the program of extracurricular activities must be planned with this in mind.

If young people live in a democratic environment, five hours each day, ten months each year, until the age of 18, they will have certain habits established that will tend to make much of their conduct of an instinctive nature.

Therefore, the most neglected opportunities for citizenship training in the high school are the opportunities which come daily in the usual school routine and which afford teachers and principals the chance to direct immature youths in making wise choices of conduct. A more complete utilization of these opportunities should be the challenge to every teacher and principal if the public school is to fulfill its chief obligation to society.

It is not so much how we think or how we feel but how we act that really counts. The neglected areas do not relate to inadequate knowledge or improper attitudes but to a much more important factor in conduct, namely, habits. Good citizenship consists of wise choices of conduct in relation to particular situations. The ability to make these choices requires reflective thinking; however, in actual practice the individual acts quickly and is guided more by feelings than by intellect. If the school can idealize desirable objectives and generate enthusiasm about these ideals, they are more likely to direct the individual's course of action.

Free Reading in Evansville

C. H. LAWSHE

ONE of the significant changes that has been brought about by a curriculum revision program in the schools of Evansville, Ind., is the introduction of free reading into the English courses. Formerly emphasis was placed upon intensive reading of a few selected classics and definite stipulations regarding outside reading and book reports were required of pupils.

Under the courses placed in operation at the beginning of the school year 1936-37, emphasis was shifted from intensive to extensive reading, from teacher-chosen classics to pupil-chosen materials and from reading for knowledge to reading for experience and pleasure.

The general philosophy of the entire curriculum revision plan recognizes the school library as the center of the instructional program—the hub around which educational activity and experience revolve. So it is natural to turn to the school library in quest of facts that should in some degree, at least, measure the effectiveness of the free reading program.

To obtain a basis for appraising the effectiveness of the new program in Bosse High School, one of Evansville's three public high schools for white pupils, a comparison was made of the library circulation in selected fields for corresponding periods of time prior to and after introduction of free reading. The fields selected were literature, travel, biography and fiction.

So that circulation data would be comparable from the standpoint of time, figures[1] were obtained for the first seventy-two days of the school year, 1936-37 (the year of the installation of the new program) and for the first seventy-two days in the preceeding school year, 1935-36. From these figures the per capita circulation was computed by dividing the circulation totals by the average daily attendance[2] for the respective periods.

The data presented in table 1 show definite conclusions:

1. The library circulation in four selected fields indicates that pupils continued to withdraw the same number of volumes after the introduction of free reading as before.
2. The per capita circulation in the literature classification remained constant.
3. There were marked decreases in the fields of travel and biography.
4. There was a corresponding increase in fiction circulation.

Table 1—Comparison of Bosse High School Library Circulation in Selected Fields for the First Seventy-Two Days After Introduction of Free Reading and for the Corresponding Period During Preceding Year

Classification	*Total Circulation*		*Per Capita Circulation*		*Percentage Gain or Loss*
	1935	*1936*	*1935*	*1936*	
Literature	699	728	0.59	0.58	0
Travel	581	263	0.49	0.21	−57
Biography	811	519	0.69	0.41	−41
Fiction	3553	4478	3.01	3.56	+18
TOTAL	5644	5988	4.78	4.76	0

[1]Circulation data supplied by Suzette Dunlevy, Bosse High School librarian.

[2]Attendance data supplied by Wilma Espenlaub, secretary to the principal, Bosse High School.

Table 2—Tabulation of Attitudes Expressed by Pupils Toward New Reading Program in Bosse High School

Idea Expressed	*Number*
"I like the plan because I can select what I want to read."	8
"I have enjoyed my reading more."	8
"My reading has been more meaningful because I have not had to worry about making a report."	5
"The plan caused me to do reading that otherwise I would have had no time for."	5
"When I enjoy my reading I get more out of it."	5
"I like the plan because it allows me to read at my own rate."	3
"The system caused me to want to read more."	2
"I learned to enjoy different types of reading."	1
"Reading day after day was tiresome to me."	1

If circulation is a measure of the amount of reading, and if the fields selected represent a cross section of English and leisure time reading, pupils have continued to read as much under the new plan as they did when outside reading was required and the shift has been from nonfiction to fiction. While these figures do not take magazine reading into account, it is probable that there has been a marked increase in that field because of the emphasis that has been placed on periodicals in several of the revised courses of study.

To the teacher who is firmly convinced that it is always better for a pupil to read nonfiction in preference to fiction the figures are disturbing. Pupils, no longer fettered by imposing lists of readings selected with little consideration of pupil interest or comprehension, have taken the natural channel in selecting the types of literature which they most enjoy and which most interest them.

That pupils are selecting their own comprehension and interest levels is supported by evidence provided when boys and girls in one American literature class were asked to write anonymously their comments regarding the new plan as contrasted to the old system.

One said: "Through this new reading program I have come to like reading much more. When I used to have to make a report on every book I read I didn't like to read because I would have to remember the important parts of a story, the names of the characters and the main incident. By the old method I frequently didn't get much sense out of the book. Now I can read purely for my own enjoyment."

Twenty-eight pupils expressed themselves in written paragraphs and, while each statement was different, the general ideas expressed in them have been compiled in table 2. There is only one adverse criticism of the program and, while the statements were not signed by the pupils, it is my opinion that this criticism came from a pupil who at the time needed glasses and who has since obtained them.

The generalization naturally follows that the pupils are finding reading a more pleasant experience than formerly. It is doubtless true that some pupils are reading materials of a so-called "lower" type, but at least they are not being taught to dislike "English" as they apparently have been in the past.

The whole program has placed a new responsibility upon the progressive teacher and has raised him from the category of a checking clerk to the position of a skilled director whose task it is to build upon the foundation of appreciation that each individual possesses and to elevate his literary tastes so that he may grow and develop into a mature and well-rounded personality.

Languages as a Social Study

ROWLAND D. HASS

WE HAVE met in our present day teaching a new situation, namely, the fact that approximately 73 per cent of our pupils in Eastern High School, Detroit, and ours is a fairly representative group, have not the ability to take the traditional foreign language course. Of the 27 per cent remaining only 15 per cent take college preparatory language work.

We must meet the needs of the 73 per cent in our general language work for the number of general pupils in school is rapidly increasing because of a new social and economic situation. The educational systems are seeking to meet the needs of those who finish the twelfth grade and cannot go to work by either a thirteenth and fourteenth grade in high school or a school of general studies in the first two years of college.

In the teaching of general language courses we keep a controlled vocabulary and use reading material the vocabulary increase of which is easily within the mastery of any pupil. We always test for comprehension and seek to stimulate motives that will lead to greater outside reading in the literary material or in the material covering some phase of a hobby or vocation in which the pupil is particularly interested.

The cultural end is stressed and the drudgery of the traditional course is replaced with reading for comprehension, songs, poems, art and music appreciation. Simple conversations are carried on and repeated until the pupil feels at home in the language he is using.

The relationships between English and the foreign tongue are continually stressed and not only the etymological phases of the work are made obvious to the pupil but the social forms are studied.

Geography and the study of the language environment naturally go hand in hand. We emphasize the relationships and differences between the environment of the people studied and that of the American people.

By emphasizing languages as a social study, stressing the cultural background and endeavoring to develop natural ability, we are meeting an apparent need in the study of the foreign languages of today.

Six New Areas in Education

One hundred and one new areas as unconventional as C.C.C. camps must be developed if schools are to meet all the demands of education tomorrow, says Virginia's superintendent

SIDNEY B. HALL

WHETHER we define education as a study of past life, as abundant living or as preparation for future living, we are confronted with change.

The accumulated knowledge of civilization is alone sufficient to make education today different from what it was yesterday. Even within the memory of our parents, education was generally thought of as knowing many specific things. Possessing "all knowledge" was once almost a possibility and a reasonable goal for the man who would be educated. Now the span of life of centenarians is not long enough to study all the courses offered in schools and universities.

The intrinsic nature of the world's store of useful knowledge in the twentieth century classes it with those elusive things which to seek directly is to lose. Habits of work, methods of obtaining information, attitudes toward the nature of facts and wisdom in their use are now the stock-in-trade of the educated man. He can thus obtain what he wants when he needs it and, instead of education consisting of many stored-up facts, education consists of being able to make intelligent and wise use of the world's mammoth catalog of knowledge.

It is only necessary to mention the contrasts between today and yesterday and what can be definitely sensed just around the corner tomorrow. Today we speak almost at will to the uttermost parts of the earth and tomorrow, we are assured, we also shall see what is happening on the other side of the world as if it were only across the room. Not only can we hear and see at the time, but the library will have a record so that the children unto the third and fourth millennium also may see and hear. Shall a person necessarily have to read to know?

Scientists freely predict that we are to become a mobile race and that many of us even may be domiciled on wheels. The family airplane does not represent an absurd idea to the American—if on wheels, why not on wings? What a contrast to 42 desks fastened to the floor, each with 15 square feet of floor space, with a bookshelf crowded in a corner!

The economy of abundance is with us now. After unnumbered thousands of years of groping, in one short generation the economy of scarcity has been deposed in its physical and intellectual aspects. Leisure has been attained and because of our unpreparedness, because social and spiritual development has not kept pace, it comes as a plague, "unemployment," rather than as the boon so ardently sought.

Whereas within the memory of man it took 80 to 90 persons on the farm to produce for 100, now about three-fourths of the farm work is done in implement factories, sales rooms, commission houses, canneries and chain stores so that 10 workers in direct contact with the soil can feed the 100. Whereas the great used to command a coachman-and-four, the average man today can dispense with the coachman and by the pressure of his foot roll out with the power of 90 horses.

Today we have not only the faith but also the power at our command to move mountains; but we are yet short on understanding, wisdom and love. Can we be trusted to manage 90 horses? Look at the death toll! The same power that will move mountains also will destroy cathedrals and hospitals and will impoverish and destroy nations.

The Incomparable Teacher of twenty centuries ago defined one's neighbor adequately for all time, but we need to teach each generation how inter-related the entire world is today. Like the blind men of Hindustan, our powers of observation are so limited and our material civilization is so big and complex that we have yet to examine it in perspective. Although education has developed science from a series of compartments filled with classified "unchanging facts" to methods of measuring the errors in these "unchanging facts" and discovering new "facts" and relationships, education as a whole tries to protect itself from change. Educational research that does not support or tend to strengthen the form of education set up thirty years ago is still dangerous. Original thinking in education is no more welcome today than power-driven machines were to the trade guilds of old. We schoolmen live the psychology of "bigger and better" and "everybody is doing it." A dissenter is a traitor to the profession.

Since the National Education Association disapproved so vigorously of Doctor Rice's studies in Philadelphia, to the present day, educational research that will affect the ideal of a factory type of school or that proposes a check for its efficiency has been confined largely to university laboratories.

So long as a five or six hour day, a five day week and a thirty-six week year are sacred, so long as a "trained" teacher cannot be distinguished from an "untrained" one except through an examination of paper credentials showing college credit for courses passed and years taught and so long as teaching is a vestibule occupation, the practical new areas in education will be confined to nursery schools, junior-senior high schools, junior colleges, summer schools and night classes, with a little sideshow of such adult education and vocational training as a disinterested public will support on a credit hour basis.

Our schools were developed to give instruction intended to fit one for the

learned professions or to live the life of a gentleman of leisure. They have tenaciously clung to the form and organization and method thought to serve that purpose. Teachers must be academically trained and the dominating tempo is that which will make everybody a white collar worker. Can you imagine a school system originating a C.C.C. camp? Why was not adult education under the New Deal set up under the control of the established school organization? If our schools are to meet the demands for education tomorrow, there will be 101 new areas developed as unconventional as C.C.C. camps.

Schools of the Future

A few of these possibilities which are in sight or which are definitely heralded, include:

1. We need a new type of administrative research on a practical basis of the field experimental demonstration type. Our educational form has "just growed" without justification even for academic type learning. We have thought that it suited the 5 per cent or 10 per cent of the population who engage in the learned professions. The new job of educating all the people for all the world's activities has no precedent. As we do not put new wine in old bottles so it may not be wise to put this new job in such schools as we have dominated by the "take it or leave it" attitude. Society is beginning to react with C.C.C. camps, farms for delinquents and welfare agencies, which threaten to put the major job of universal education in the hands of officials who can think beyond the 3 R's and in other than catchy pedagogic terms.

Research by experimental method should make our teachers' colleges effective in a way that can be demonstrated and it should result in a professional corps of career teachers.

Such research should enable educators to distinguish more clearly between brick and mortar monuments to community pride and ignorance and real education. Good schools and fine school buildings should not be synonymous terms in the popular language of either school people or laymen. The schools of the future may be located in all sorts of buildings, public and private, teachers meeting pupils in all sorts of places at all hours of the day and night in the most logical, most effective and most convenient manner that the necessities of the desired teaching and learning dictate.

2. As research and the new experimental demonstrations increase the effectiveness and efficiency of our schools, this new area in professional achievement will usher in a new era of school growth in which the profession will be absorbed in professional rather than financial problems.

The financial problem of adequate funds can be solved only by giving an educational service that not only needs but also wants. Reason and argument are largely futile in obtaining funds from the society that wants to spend its money for armament, tobacco, liquor, luxurious automobiles and cosmetics. We have been trying it for several decades and have made but little progress. Our job is to change the relative values society puts upon the schools it thinks it will get and armaments, jails and chewing gum.

Money Will Then Flow

If schools are what they are because of lack of money to employ good, effective teachers, then might not the part of wisdom be to employ only capable teachers with reasonably adequate salaries? If we attempt only what we can do well, the schools should create a new generation that will not place such a high value upon firecrackers, tobacco and war that it cannot be interested in finding the necessary support for universal education.

Hence, a second new area in education will grow out of the first and something akin to efficiency engineering in industry will become prominent in education until educational organization and practice are attuned to the educational work to be done. Once the public has experienced a good education and likes it, money will gravitate as needed to the schools just as it does to any of the world's work that is being done effectively and efficiently.

3. Throughout history the growth of civilization has been accompanied by the deterioration of the physical and mental and spiritual qualities essential for ideal motherhood. Unless, or until, the schools or some other agency can redirect this obvious trend, nursery schools will make a rapid growth and children will be cared for by hired mothers more and more. The nursery school is on its way, it is even now on our doorstep; it will be an essential institution in urban society during the middle of the twentieth century and likely long thereafter.

4. History repeats itself. There are learned and successful men today who attended an ungraded school, who took little interest and learned little from books until they were 12 to 15 years of age. At 20 or 30 they had left their precocious playmates far behind in learning and achievement in life. They lost nothing of permanent value by not being forced to pass the fifth grade at age 11.

Then why try to push the boy who never can understand fifth grade through the school's treadmill with all the others? The child with non-academic talents or interests at 12 may or may not develop them at 16, but that does not excuse the school for not educating him.

Educational science appears to have carried the point that the heterogeneous rather than the homogeneous is the better learning environment and the new integrated elementary school program must be freed from the shackles of our compartmental and departmental grades. The major function of the elementary school is not academic instruction with academic standards in the 3 R's such as only future professional scholars can attain.

Formal Setup Ineffective

It is doubtful if we can attain the true citizenship function of elementary education as long as we retain the usual formal setup of today. More and more teachers will be assigned a group of pupils and remain with them as their guide and responsible instructor long enough to learn them and their needs. Under such a plan apprenticeship may begin for some at the age of 12 and shops and gardens will be used more than classrooms.

This forecast is about 10 per cent to 15 per cent an adjustment of what now exists and from 85 per cent to 90 per cent a distinctly new area in education. We have been glaringly in-

efficient and ineffective in trying to force all pupils over hurdles which only 10 or 15 per cent of the population can take. There are other hurdles which all can take and which are more important.

The up-and-coming, stepping-stone teachers in the ungraded school educated the generation that changed the economy of America from that of scarcity to that of abundance and the vestibule teachers in our graded schools educated the generation responsible for the economic and social mess we have been living through these last few years. With our up-and-coming youngsters transformed into professional career teachers and a school organization that will give the teacher a chance to know his pupils and thereby have a chance to teach them, possibly we may develop a generation of stalwart citizens with character, virtue and an iron will to do for our society what the generation now leaving us did for industry.

5. A wise teacher of one and two generations ago whose pupils were noted for their ability to pass the most rigid college entrance examinations would not teach literature or history directly even though his pupils must pass examinations in these subjects. His judgment was that if the pupil was worthy of a college education, he would learn history and acquaint himself with literature as a natural by-product of his study of science and language and for the sake of learning itself.

In that society youth went to college only when driven by a strong inner urge for learning. Universal secondary school education had no part in this picture. A capable, learned, honest master was doing an honest job with consummate skill. There was no spoon-feeding or crutches in the form of credits.

Today our secondary schools are wasting the time and energy of three-fourths of our secondary school pupils by trying to force all to drink from the fountain of academic knowledge. It appears that we have overemphasized the general education function of the secondary school and underemphasized its vocational functions. The period when muscles and interests and ideals are so conspicuous in their changes is the logical time to give an opportunity for a wide variety of learning in an objective fashion and let academic learning at this stage be a by-product. Few, if any, persons would be injured and practically all would profit immeasurably if they had mastered a manual type trade or vocation during their secondary school period.

It is certain that the secondary school would more nearly serve all the pupils if it were dominated by the trade, manual-vocational motive rather than the college entrance motive.

This new area in education must extend far beyond the confines of what we have been thinking of as a school, even beyond the part-time and evening class, the home project or apprenticeship, and correspondence lessons. This new area will require a staff as diversified as our civilization and will serve the educational needs of all the people all the time after they leave the grade school. The school will be compulsory to about the age 18, but as a mobile population adapts itself to rapidly changing industrial conditions, short courses and vocational rehabilitation will not be confined to the physically disabled.

6. After the compulsory secondary school and before the work of the world is ready to claim youth and before experience in the world and maturity enable youth to profit most from college study, a term of from six months to two years may be profitably spent in an educationalized C.C.C. camp.

The dominating purpose of these camps will be to direct character maturity through service in making this a more beautiful and healthful world in which to live, in caring for those who need assistance, in prosecuting general public works of various sorts and in performing all the duties incident to feeding, clothing, sheltering and servicing the program which will provide a capstone to universal compulsory education.

From this camp type of school the pupil will go to work or to a college or university. If he goes to work, the secondary school's continuation program will be available to service his educational needs. There may be some justification for dropping the terms junior and senior high school and junior college for the simpler secondary school, college and university. The university should then confine itself to learning on the creative level in all fields.

Shadow Study for Beginners

MARY L. GARVEY

AT FULLER SCHOOL, Minneapolis, we attempt to have the child gain during his early school life, through shadow study, some understanding of the meaning of seasonal change and of the principle that the sun gives more heat when it moves higher in the sky and when days grow longer.

As the child observes variation in shadow length and direction and experiences simultaneous changes in the natural environment, he gains some understanding of the dependence of all life upon the energy of the sun.

Children who have a background in shadow study grasp the idea of the influence of the sun on the lives of people at home and in other lands. It helps them understand how the work, play, food, clothing, shelter and health of people in the polar lands, the desert and equatorial regions are directly related to the effect of the sun's rays.

Throughout the study of the variation in shadow length and direction, an effort is made to stimulate the child to an inquiring attitude and to satisfy his curiosity through first hand experience. As he advances in years, we may expect him to apply his findings in these experiences to his solution of some of the complex problems of life, as they confront him. We feel sure that the child who has had the benefit of these experiences will grow more tolerant of others and will enjoy the seasons more because he understands them better.

Petition Madness

ARTHUR C. SELKE

SUPT. HARLAN PFISTER of the Grassy Center public schools was worried for the first time in his administration as he awaited the arrival of three members of the school board for its monthly meeting.

A few hours before, in the third year of his august reign, he had received a petition requesting the ousting of two excellent teachers. What dismayed him most was the array of signers, many of whom he had considered true friends. This request preceded the monthly school board meeting so closely that he had been unable to get in contact with a single member beforehand.

It had all come about because he had tried to infuse educational ideals into a parent-teacher association that had become a social club. As a result of his efforts some parents had made schoolroom affairs their own business and this petition was one of the indirect results of his attempted reform.

The first of the board members to arrive was the secretary, the local editor, who also was a friend of the schoolman. Mr. Pfister at once informed the newspaperman about the document and warned against the dangers of government by petition. He agreed at once until he saw the signatures, which included both subscribers and advertisers. The treasurer, a farmer, and the chairman, a banker, arriving together, likewise discussed the petition. The farmer member thought that the petition was "all right."

"Let the people express themselves if they want to," said the treasurer.

"At least we'll know the people's sentiments," said the banker.

"Perhaps," said Mr. Pfister, bewildered for lack of support, "the board is better able to interpret petitions and should receive them."

"That's right," said the secretary knowingly. "Have the petition handed to the chairman."

Although nothing more was said, the atmosphere was tense for the rest of the evening. Unknowingly Mr. Pfister had "passed the buck" to the two men who had committed themselves. He had, furthermore, suffered his first real rebuff and the next monthly meeting was the one at which teachers' elections would be made.

Mr. Pfister had little hope of reelection but he continued to work as conscientiously as ever. He still tried to infuse the community with educational ideals, until he found that some of his ideas expanded into signed documents. Once in a facetious frame of mind, he suggested some humorous passages for a petition which was being framed, little realizing that this would be signed by many who did not read it.

As the result of these activities many signed requests were handed to the chairman of the school board. One asked for the removal of the remaining teachers, one demanded tearing down "dangerous playground equipment," one asked for more high school dances and another wanted these dances abolished. Even high school pupils started petitions which temporarily had become Grassy Center's great indoor sport for all except those who were connected with the school administration. To these they became a pest.

One thing worried the superintendent. He was reconciled to leaving, but the board members had been genuinely friendly and he hated to leave a mess for them to clean up.

As he went to the next monthly school board meeting he was ready to take his "demise" in a sporting manner. The three members arrived a little later in a body, probably intentionally, to save embarrassment.

Mr. Pfister had not expected a congenial meeting but he was wholly unprepared for the forthcoming rudeness. He thought that they might at least discharge him like gentlemen. The editor banged the minute book on the desk, the farmer used profanity and the banker looked as though he were suffering from apoplexy. Puffing his cigar relentlessly, the chairman deposited a bundle of papers in the near-by wastebasket.

Even before all were seated the meeting was called to order. The minutes were promptly approved and other matters were attended to without any comment whatsoever.

"Any further business?" asked the chairman.

There was a hush.

"What about the petitions?" asked the editor.

"They are disposed of," bellowed the chairman, looking significantly at the wastebasket.

"I move that Prof. Pfister be elected next year with a $200 raise provided he refuses all petitions," volunteered the farmer member.

"I second the motion and I will fix the contract accordingly," said the editor.

Except for the reelection of all other teachers, there was no further business and the meeting was adjourned.

The newspaperman lingered behind to make out the new contracts and said, "If they want to make trouble about this I'll write a hot editorial and publish this handsome document."

The editor pulled a petition out of his pocket and showed the young man a phrase rendered less obscure in the mass of verbiage by the underscoring in red. The marked portion, which Mr. Pfister had dictated himself in a facetious mood, read: "And we will gladly *decapitate* ourselves in our efforts to improve the administration." This petition had been signed by many prominent people of Grassy Center.

"It is not this phrase that turned the trick, though," added the editor. "You certainly used the right tactics in permitting an overdose of petitions. They'll never bother you again, I reckon."

With a Happy Ending

LELAND B. JACOBS

Junior and senior high school pupils at Lincoln Consolidated Training School at Michigan State Normal College objected to having their parents witness classroom performances on visiting day. How adolescent self-consciousness was circumvented and parents were enlightened is told by the English supervisor

THIS is a success story in social interpretation. It is a school story with a happy ending.

Visiting day in the elementary grades at the Lincoln Consolidated Training School of the Michigan State Normal College, Ypsilanti, had been a success. Through the skillful planning of the elementary student council every feature of the afternoon ran smoothly. Parents and patrons visited the regular afternoon classes in the various grades and later enjoyed an informal social hour with the elementary school faculty. An enthusiastic drive to get parents to attend was put on by the children and, in return, the parents were enthusiastically interested in their visit.

But in the junior-senior high school no such plan could be satisfactorily worked out. Adolescents are self-conscious and are striving toward independence. To have parents and patrons witness their activities in the classroom was not to their liking. Though they knew of the success of the plan in the elementary grades, the high school student council opposed such a plan decisively. The youth were willing and anxious that parents should know of the work of the school but they were also determined that the procedure should be something other than a visiting day.

"Open House" Was Solution

The high school faculty knew that to attempt any such plan without the support of the student body would be futile. Teachers were definitely interested in having patrons see some of the features of a modern high school classroom that they might better understand and interpret materials and technics used in secondary education. How to achieve these ends and at the same time have the full cooperation of the pupils was the question into which the whole idea resolved itself.

"Open house" was the result of the collective thinking of the faculty. There would be no visiting day at all; instead there would be open house in the evening. There would be no visitation in the classroom; rather, there would be a program in the auditorium, with a social hour and refreshments later.

This plan was eagerly sponsored by the student council. The pupils saw a chance to make contacts with school patrons without exposing themselves individually to criticism in the classroom.

The program in the auditorium was the focus of the evening. Student council members, as well as the faculty, knew that to import a speaker would not achieve their purpose. The faithful would come, as always, but the rank and file of high school parents would not thus be reached. A play by the English department depicting some glimpses of secondary education might draw a crowd, as plays are likely to do; or a style show that had been given by the home economics department at an assembly also would make an interesting program.

But, after all, to get people to the school was not enough. The real motive was to educate parents to an acceptance and appreciation of modern school practice. To make dramatic the work of the school, to entertain and instruct, these constituted the elements in the type of program desired. Features of vaudeville were adopted. The plan was, finally, to fit together skits and scenes from the various departments of the school in such sequence that good classroom practice would be in evidence.

Each department was canvassed for possible skits of not more than six minutes in length. These were brought together by a central committee which, from the various suggestions, selected those that gave the best-rounded picture of high school life. Each skit was then worked into form for presentation in the classroom and pupils vied with one another for parts in the skits. Only one combined rehearsal was held and that on the day of presentation. Here was truly paradoxical cooperative planning. Parents might not be invited to come to the classroom, but school work exhibited on a stage—that was a different matter!

Six-Minute Skits

The devices used in giving the program dramatic appeal need not be elaborated. Some general suggestions of what was done will indicate the potentialities of such a program. The high school orchestra played. To announce the various skits and to serve as general integrators, two high school girls read excerpts of explanation and announcement from the school page of an imaginary newspaper.

The skits themselves were concise and wisely selected. They came whole-cloth out of recent classroom work. Classes in social studies demonstrated the use of movies and the dramatization of citizenship activities in the classroom. Mathematics showed children working intelligently with unknowns in solving

problems. The English department used a summary of a magazine-reading survey of the community and some well-written creative prose.

An explanation of how to plant fall bulbs and shrubs, illustrated with class-made charts, came from the natural science department. Since this is an agricultural community, the senior high school agriculture classes discussed the values and uses of fertilizers.

Stunts were the contribution of the physical education department and foreign language classes demonstrated enthusiastically their command of spoken German. The shop illustrated both processes and results of shop work; the girls in home economics brought their sewing to the stage with them. To give the program a dramatic finale, the typewriting classes typed to music. Throughout the program the audience listened attentively. Coughs were few —an encouraging sign always to those giving programs.

At the close of the program parents met with the various homeroom teachers for discussions of mutual interests. Home reports had been sent out the week previously. This was an opportune time for discussion of pupil accomplishments and needs, a chance for school and community to understand each other.

The evening ended with a social hour in the playroom, where the high school chorus sang and the student council served refreshments.

Thus one high school met the problem of making home contacts in the face of what seemed an impossibility. Pupils and student council were delighted in their accomplishments on the stage and in the turnout to their open house. The faculty was delighted to see the children so eager to demonstrate what they were doing in the classroom. Parents and patrons had had an interesting and instructive time going to school.

"Open house" had served its purpose in greater measure than anyone had dared to hope. In good Algerian tradition, here was the poor outcast turned by ingenuity and persistence into an unusual and happy success.

Financing the Senior Class

HAROLD BOULTON

EVERY year the graduating class of our secondary schools is confronted, in addition to the usual scholastic demands, with the discouraging job of raising funds for the entire expenses of the final year—senior class trips, gift to school, rings, printing the annual and a host of other expenses incidental to graduation.

For several years, the class struggled along under this heavy financial burden until the student council decided that something should be done about it.

The Northville Central School is organized on the 6-6 plan. The student council is comprised of two members from each class in the junior-senior high school, a faculty representative and the high school principal.

A committee was organized to study the budgets of previous graduating classes in order to have something tangible with which to work. It was found that the classes spent, on an average, $300 incidental to the commencement program. (The class trips have been abandoned.) In order to raise that amount the class would have to present and promote two plays; sell magazine subscriptions and candy; hold cake and food sales and tag days, and beg advertising for the various publications and programs, thus creating an antagonistic attitude among the merchants. Editing the senior annual, as a rule, entailed a loss of valuable time and money at the end of the year and did not prove advantageous to the class or especially helpful to any individual.

The plan that evolved and was accepted by the student body consisted of a financial agreement between grades 7 to 11 and the senior class, whereby the former would give $100 to the senior class provided the class raised an equal amount during the senior year.

A study was made of the ways and means of raising funds and the different classes were allotted a definite number of dances, sales, movies and periodicals in accordance with their budget needs. The senior class was allotted one play and the senior annual with which to raise $100. Experience showed that enough money would be raised if the energy was applied. This amount, together with funds accumulated in previous years would give the class its budget needs.

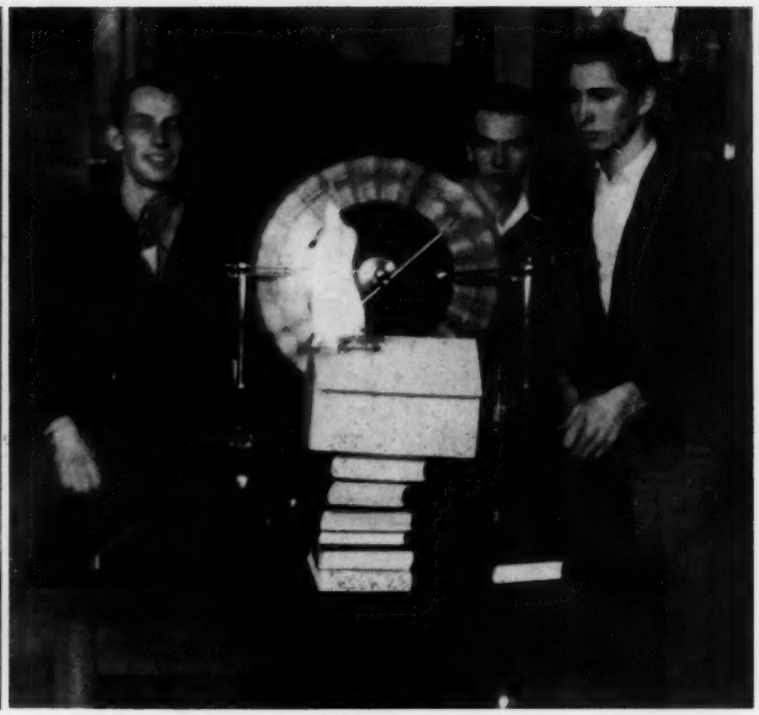
A student council committee makes the appointments and all classes except the senior class may interchange assignments, provided they make their budget appropriation. For example, at the time this was written, all classes with the exception of the tenth grade, had raised their quotas through the medium of the student council. The sophomore group has been permitted a movie and a dance that had been allotted to the ninth and the eleventh grades, respectively.

The $100 given to the seniors at the end of the year by the various classes is pro rated among them so that the seventh grade gives $10 and the eleventh grade, $35, with the rest in proportion.

In addition to raising this money for the senior class, each class makes out its budget for the current year and plans with the student council ways and means of raising the quota. We have found that if the junior class ends its year with a balance of $100, it is fairly secure and completes its last year without financial embarrassment.

Will this program work? It has worked in the Northville Central School for five years. In addition to the aid given the graduating class, a greater cooperation between all the classes has developed. This fact alone has been worth all the effort needed to promote the enterprise.

In order to meet any emergency that would interfere with this program, the student council has set aside a fund to help out any class. At present, there is $50 in the fund. It plans to build this up to $100. When other financial problems arise we feel that we shall be able to work them out.



Left: A pupil shows how an aluminum ring jumps from the demonstration transformer coil when the switch is pressed. Right: A lightning flash sets the beaverboard model house on fire.

Envoys of Science

E. R. HARRINGTON

ALBUQUERQUE, N. M., has approximately 7000 school children in the grades and junior high schools. Many of these schools have science clubs for the promotion of scientific interest. Every year, as head of the science department of the high school, I have been called upon several times for scientific demonstrations before various groups in these schools. On these occasions I have loaded portable equipment into my automobile, arranged for the care of my high school pupils during my absence and have put on the demonstration alone or with the assistance of one or more pupils. This year the demand for demonstrations reached such a number that this procedure had to be discontinued and another plan evolved.

It was decided to send out one or more crews of high school pupils for demonstrations. As assistants in the work they had proved their competence and interest. Volunteers were called for. Only the volunteers who had study periods at certain times of the day and who had scholastic averages sufficient to stand absences from class work were selected. The work started with eight pupils who familiarized themselves with their equipment and its technic.

We wrote to the schools in the city asking the principal whether he wanted one or more of our science demonstrations and, if so, what day would be most to his liking. In the letter we outlined our schedule.

The response was 100 per cent from the city schools and we decided to include several of the larger schools just outside the city limits. About two-thirds of the first "booking" was completed at the time this article was written. Our pupils have been well received and have had requests for return engagements next year. We are now contemplating sending several additional crews to present separate and distinct acts.

The head of the science department at Albuquerque High School tells how the enrollment has increased 300 per cent in eight years

Such demonstrations can be arranged with little trouble. A traveling kit of materials can be selected and this is checked before each trip.

A brief review of the demonstrations we have presented up to date illustrates our technic. In selecting the material, one major consideration was that it be compact so that it could be transported in the back seat of a motor car and still allow a carrying capacity of four pupils.

Most of the pupils are interested in magnetism and electricity so the equipment box includes a lodestone, iron filings, two strong bar magnets, a small electromagnet, a demonstration transformer coil and a few coils of wire with a toy motor and some Christmas tree lamps attached. This equipment will show the action of

A science demonstration crew completes preparations for its next trip.

the natural magnets and how the permanent magnets not only attract but repel.

The homemade transformer coil has everything in sight. We demonstrate the alternations of the electric current from the city lighting system, the action of the simple transformer coil as it is slipped over the transformer core, Lenz's law with aluminum rings that jump several feet into the air when the switch is pressed and an electric light bulb that burns in a glass of water without being connected with the transformer coil. A homemade electromagnet weighing 1 pound will lift more than 100 pounds.

One of the pupils, while explaining the action of an electric motor, is making one from a large cork, a few feet of insulated wire and several pins. He runs this from a storage battery. The stunt is always good for starting a great number of questions from the children in the audience. For this reason the crews generally finish the program with this demonstration.

Static electricity is of interest so a static machine is included with our portable equipment. The crew shows the action of the machine and how the sparks jump from one electrode to the other. An electric whirl is attached and is made to spin from the electricity leaping from the sharp points. A beaverboard house is attached to one electrode of the machine and the house is struck repeatedly by 6 inch "lightning flashes." Three darning needles are set into the house top and the machine is started again with no strike resulting because of the protection offered by these "lightning rods."

While the machine is being whirled one of the demonstrators removes the needles with a piece of wood and the house is again struck by the lightning. A piece of filter paper dampened with gasoline is placed on top of the house and when this is struck the house bursts into flame.

Chemical experiments are shown also. The most spectacular ones used to date have been the prepar. ion and properties of oxygen and carbon dioxide. Oxygen is made in the usual manner, collected over water and used to demonstrate the burning of phosphorus, charcoal and iron. A small piece of steel wool burned in oxygen gives a startling display to the grade school children. The carbon dioxide is generated from some pieces of dry ice.

Dry ice also is used for running a small steam engine. The engine, of about one-tenth horse power, was made in our own shops. For a boiler a quart milk bottle half full of water is used. Pieces of dry ice dropped into this bottle give off carbon dioxide. A rubber stopper and delivery tube lead this gas to the steam engine which runs at a speed of about 2000 revolutions per minute. A cloth is wrapped around the bottle in case it should break but the chances are not great for an accident.

These shows are both interesting and instructive. All that we require from the school that is visited are a table and a bucket of water. Usually the demonstration crew is made up of three pupils. Any one of the pupils can take any part required. Actually they vie with one another as to who shall do the choice bits of explaining.

Pupils work up considerable showmanship and a "patter" that would do credit to some professionals in the field. They think up additional things that they can do and say and are permitted to be as original as they wish, as long as they limit themselves to the truth.

As a project from the standpoint of the pupil demonstrators, it certainly has been worth while. The demonstrators have made distinct improvements in their own knowledge, their ingenuity has been challenged and they have worked up a coolness "under fire" which hardly could have been obtained any place in our school system. They have imparted knowledge to those they have visited and have increased interest in the achievements of science.

Our science department has made a 300 per cent gain in enrollment during the last eight years and we expect to keep it growing. We have the interest of our own pupils and we wish also to obtain the interest of those who will eventually succeed them. Within a radius of 3 miles from the high school there are 15 school buildings. The high school has the equipment, the pupils, the interest of visitor and visited alike and as long as my automobile holds out we will keep on cruising about Albuquerque.

Legislation of Early 1938

M. M. CHAMBERS

REGULAR sessions of the legislatures occur this year in nine states only: Massachusetts, Rhode Island, New York, New Jersey, Virginia, South Carolina, Kentucky, Mississippi and Louisiana. There also have been special sessions in Arkansas, California, Georgia, Kansas, Kentucky and Ohio. As this article is written some of the sessions are still in progress or too recently adjourned to make a report possible. New laws in three states will be mentioned.

Mississippi authorized school districts to borrow for short periods to finance additions, repairs, heating plants, fixtures or equipment for educational buildings, without a popular election. The term of the loan must not exceed five years, and at least one-fifth must mature each year. Interest must not exceed 6 per cent and the annual tax levy to cover principal and interest must not exceed two mills; nor can the aggregate indebtedness of the district exceed any existing limitations.

After the school trustees have determined the necessity for the loan, their resolution goes to the county board of supervisors or to the municipal mayor and council, as the case may be. This body, after verifying the facts stated in the resolution, must publish its intention of approving the loan at least fifteen days before taking final action. This is to allow time for a majority of the electors of the district to file a petition opposing the loan. If such petition is not filed within fifteen days, then the county or municipal authority must give final approval.

Another similar act authorizes borrowing only for the purchase of heating plants, fixtures or equipment for buildings which could not otherwise be used for educational purposes. This may be done without a popular election unless 25 per cent of the electors of the district file a remonstrance within ten days after public notice, in which case an election must be held.

A third act authorizes consolidated school districts to borrow up to $5000 for a term not exceeding ten years, to be used in supplementing funds from the Works Progress Administration or any other federal agency in constructing, repairing or equipping school buildings. Such loans must be initiated by a petition signed by 50 per cent of the electors of the district; no further election is necessary. A special tax to retire the debt is made mandatory and the debt is expressly placed outside all existing debt limitations.

Kentucky established, as of July 1, 1940, a new state teachers' retirement system, covering all public elementary and secondary schools except those previously having local retirement systems. Provision is also made for the voluntary merger of such local systems with the new state system and the establishment of local systems hereafter is prohibited. The state system will be administered by a board of seven members, consisting of the superintendent of public instruction, the attorney general, the state treasurer ex officio and four others elected by the teacher members of the system, of whom three must be teachers and one, a lay member.

New school laws in Mississippi, Kentucky and Virginia are here reviewed

Present teachers will automatically become members of the system, except those who file a declination before July 1, 1940, and such declination may be withdrawn within one year thereafter without loss of credit for prior service. The teachers' contribution is 2 per cent of the salary of those under the age of 30 at the time of entrance, 3 per cent for those aged between 30 and 40, and 4 per cent for those aged 40 and over. The maximum contribution is limited to $80 a year.

The state obligates itself to contribute sums equal to all the teachers' contributions, and in addition will make a temporary contribution equal to 2 per cent of the salaries of all present teachers, to be continued only as long as necessary to cover the obligations assumed for prior service credit.

Retirement will be optional at the age of 60 if the applicant has completed twenty years of accredited service in the state, the last five years of which must have immediately preceded retirement. No retirement allowance shall be greater than $1000 or less than $100 per year, and in no event shall it exceed one-half of the member's annual salary. Provision is also made for disability allowances for teachers between the ages of 50 and 60 who have completed twenty years of accredited service.

Virginia requested the governor to insert in the next biennial budget a sum sufficient to inaugurate an actuarially sound retirement system for public school teachers. This state also prohibited any school board from employing any teacher or other employe who is the parent, brother, sister or child, either by blood or by marriage, of any member of the school board or of the superintendent. The act does not apply to persons in board employ prior to its passage.

Mississippi enacted a requirement that candidates for the office of county superintendent of education must hold a certificate showing either (a) at least two years of college training in an approved institution and at least two years of experience as superintendent, supervisor or teacher in the public schools of the state; or (b) not less than four years of college training in an approved institution. These qualifications become mandatory in January 1940.

A new salary schedule for county superintendents was also enacted,

providing base pay ranging from $2400 to $3000 for the eight classes of counties; $3300 for counties having a population of 80,000 or more and $3600 in counties of the second class operating as county units. Furthermore, counties having school lands renting for more than $8000 and less than $20,000 annually may pay their superintendent an additional $400, and counties receiving $20,000 or more in rentals may pay him $800 above the base pay.

Mississippi created two new offices in the state department of education: that of supervisor of the teaching of the effects of alcohol and narcotics, at a salary of $1800 a year and expenses not to exceed $1500 per year; and that of supervisor of school transportation, with salary to be fixed by the state board of education at not more than $250 per month, with additional allowances for one stenographer and traveling expenses.

The latter supervisor is to study transportation routes in each county and all factors relating thereto, including the density of school population, the type and condition of roads and comparative unit costs. His recommendations regarding the laying out of school routes and the letting of transportation contracts must be adopted by the county school boards, the only alternative being an appeal to the state board of education. He also is to recommend to the state board of education a reasonable per capita cost of school transportation in counties and school districts receiving aid from the state equalizing fund and make such other reports as the state board of education may require. A companion act revamps prior statutes providing for and regulating school transportation.

Kentucky required each county board of education to provide approved high school facilities for all qualified residents of the county. When the number of pupils of either race is not sufficient in any county or independent district to maintain a high school, pupils must be transported daily to an approved high school in some other county or district; or in lieu of transportation, the county board must provide for their lodging and subsistence within reasonable walking distance at a cost not to exceed $100 per year per pupil.

Mississippi empowered any school district to establish and maintain day and evening schools for adults, to improve their civic, occupational and general information and to enable them to make wise use of their leisure time. The use of the public school plant for this purpose, when it does not conflict with regular public school use, is expressly authorized, but a qualifying clause limits the application of the act exclusively to classes for which the operating expense is wholly paid by the Works Progress Administration or other federal agency.

The same state authorized any municipality having a population of 2000 or more to rent, buy or construct and equip buildings for nursery schools at a cost of not more than $5000 for any municipality. The expense may be paid out of any available funds and the provisions of the budget law are expressly waived. Parts or all of the necessary sum may be borrowed under existing general law, but fifteen days' publication must be given. If 15 per cent of the electors file a written protest within that time, an election must be held and approval by a majority of those voting is required.

Virginia created a commission to consist of two members from the senate, three from the house and two to be appointed by the governor, to revise, collate, simplify, consolidate and codify the laws relating to the public school system. The commission is to report to the governor, recommending appropriate bills and constitutional amendments, sixty days prior to the next legislative session.

Education for Family Life

ROBERT G. FOSTER

WORTHY home membership is still the forgotten objective in secondary education in many, if not most parts of the United States. The crises of the World War and the recent economic depression have accentuated the need for a better understanding of personality and human relationships in the family.

There are many reasons why the family should be the basis for a comprehensive and widespread study throughout the school system from kindergarten through higher educational institutions. Seven reasons are discussed.

1. Family experience is a universal human experience. Only about 1 per cent of all children under 10 years of age are being cared for in homes or institutions apart from their normal parents. About 80 per cent of all infants born live to marry and become parents.

2. The requirements for adequate functioning as husband, wife and parent are more varied in scope than those for most vocations for which most young people prepare themselves in school. Men and women homemakers must meet the demands that the family imposes upon them of being good business managers, good mechanics, skilled laborers, teachers, biologists, psychologists, nurses, doctors and educators. Yet there is not a vocation of any consequence which requires as little prerequisite training before entrance, as marriage.

3. Family experience is the most potent one in developing the personality of the individual.

4. The family functions as the interpreter and transmitter of the meaning of our culture to each new generation. The mother plays an especially important rôle in this respect.

5. The family today faces new problems created by a new environment, thus accentuating the parent's task of family education.

6. Since the relationship of the sexes is determined by our culture, young people can make better judgments and better evaluate current doctrines about family relationships if they have some insight into how these patterns change.

7. Family life education must involve many disciplines, cover the developmental circle of individual growth and extend through college.

Buyers Aware

GEORGE HAYES

The consumers' course at Libby High School, Libby, Mont., proved popular because of the great need for enlightenment in this field, says the instructor

THE experimental course in consumer education in Libby High School, Libby, Mont., was the direct outgrowth of an attempt to make the curriculum more suitable to the needs of the average pupil and to give practical training in the things he will do in life.

The class was limited to juniors and seniors and the average enrollment was 30 pupils. It was conducted without a text and was approached from the scientific rather than from the business or commercial standpoint. Attempt was made to apply the elementary principles of science in solving common consumer problems. Whenever possible, experimentation and laboratory technic were applied in making tests or investigations of consumer goods.

Because it was an experimental course there was no justification for purchasing expensive equipment and it was therefore necessary to eliminate many projects because of lack of laboratory materials.

Pupils were told that the course would be a cooperative undertaking, that its success would depend upon the contributions made to the group by the individual members and that grades would be based upon the initiative shown in finding and solving consumer problems. It was also made clear that nothing was barred so long as it had some bearing upon a consumer problem.

The cost of the course was approximately $20. The books actually purchased for reference included copies of "Business Economic Problems" by Shields and Wilson, "Senior Science" by Bush, Ptacek and Kovats, "Economic Problems of the Family" by Hazel Kyrk, "Our Economic Society" by R. G. Tugwell, "Earning and Spending the Family Income" by M. R. Friend and "Chemistry for Home and Community" by Pauline Beery. "Consumer Goods" was given to us by the publishers. This book proved to be a most valuable reference.

The other material gathered covers a wide range and only a few of the more important sources will be listed here. Both state and national government publications gave a wide range of information. Good Housekeeping Institute pamphlets and publications of Consumers' Research also were read. The foregoing pamphlets are relatively inexpensive and many may be had for a few cents.

In evaluating reference materials it appeared that "Business Economic Problems," "Senior Science" and "Consumer Goods" were the most widely read by pupils. The instructor found "Economic Problems of the Family" and "Our Economic Society" valuable for lecture materials. Apparently there is little connection between many business pamphlets and commercialism. We cannot say this for the *Good Housekeeping* publications. There is just enough commercialism in these to cast a cloud over the material they contain. This is not a criticism but a statement of fact. Pupils were quick to discredit some statements because of the recommendation to buy only those products advertised in the Hearst publication. This was especially true when we carried on some correspondence with this publication and learned that Pond's Cosmetic Corporation paid some $12,000 for its new vitamin A skin cream advertisement.

Again Consumers' Research offered much material for lively discussion and different points of view. The fact that it names the specific commodities that are recommended adds interest for the pupils but complicates the teaching problem for the teacher. It is interesting to note that such publications as "100,000,000 Guinea Pigs," "Your Money's Worth," "Skin Deep" and "Eat, Drink and Be Wary" were not used as widely as other sources. This was probably due to their sensational claims however true they might be. Nearly every pupil read with interest the issues of *Consumers' Guide,* a federal publication.

Many excellent projects were carried out. Pupils interested in chemistry found Beery's "Household Chemistry" useful. This was especially true for chemical tests on textiles, soaps and cosmetics. A series of household tests sent out by Consumers' Research assisted pupils with an experimental slant. Prof. C. J. Lynde of Columbia University sent a list of tests to apply to household equipment, entitled "Which Is Best?" Many were impractical for our use but others in the group made them worth their cost.

There is unlimited opportunity to capitalize the experiences of the pupil in a consumers' course. Pupils prefer to read pamphlets instead of books and would rather experiment than do anything else.

Some natural reactions to the course are listed: One parent stated that it was the only course given that taught the pupil value in terms of the things he actually buys. Another mother stated that it was the only subject her son discussed at home.

In a recent assignment each pupil was asked to write a frank and anonymous appraisal. Some typical statements taken from these appraisals are as follows: "Even dad and mother helped me carry out some of the experiments at home. At the table I am continually being asked questions about the food we are eating. And clothes—well, we aren't going to buy any more celanese dresses until the dye is set so that they can be cleaned."

Another states, "The only thing wrong with the course is that we

didn't have enough money to get the material we needed."

One boy writes, "I think the most value came to me, not in knowing the names of the best commodities at this time, but in knowing methods and technics of determining which is best at any time in the future. The Chevrolet or Ford might have been the best car in 1937; it might not be the best in 1938."

Another boy states, "At least I have learned to look at labels and to tell whether it is a good label or not."

A girl writes, "Our laboratory investigation of foods has shown me that the highest priced canned goods are not always the best."

Another, "You can improve the course by having more demonstrations and experiments."

The following surprised all of us. A boy states, "I have found out by tests in class how much metal shavings I have been eating as the result of the type of can opener we use at our house."

Another question that is always brought up is, "What do the merchants think about the course?" When the subject was announced the instructor thought it inadvisable to ask the merchants' opinion of a subject on which they were uninformed. The course was announced through the newspapers and discussed and explained at a P.-T. A. meeting.

One merchant at the P.-T. A. meeting expressed himself as being opposed to the course. He thought it could be taught as a part of other courses now being offered. His point is well taken and from recent surveys we know that some schools are incorporating a unit of consumer education in business, home economics, biology and science courses. Some of the newer texts in these fields are giving considerable space to the needs of the consumer.

Another merchant refused to aid a pupil in a project because the instructor had presented some information on a certain cereal (material taken from the *Journal of the American Medical Association* and written by a Mayo physician) and this resulted in decreased sales. This attitude proved to be poor business. Another grocer sent word to the instructor that if he had anything in his store that we wanted to experiment with he would send it up. He stated that he had so many articles on his shelves that it was impossible for him always to know which was the best value and that if we could give him any help he would really appreciate it.

The druggists made no comment so it is difficult to know what their attitudes were.

The instructor must have the courage to publicize the truth when he knows it is the truth and to guide his pupils on that course. They like it!

Adults Taught Hog Raising

S. T. NEVELN

A pig's ears are notched according to a key which gives the owner an opportunity to check its response to good breeding, feeding and care.

SWINE raising has played a major part in the development of the present high standard of living enjoyed by the patrons of the Austin High School, Austin, Minn. Aware of this fact, the board of education last year added an adult evening school instructor in corn and hogs to the agricultural staff.

P. J. Holand, farm reared agriculturalist, who for the last ten years has supervised outstanding dairy, sheep and crop improvement programs in northeastern North Dakota and northern Minnesota, was engaged for this position. This educational program has attracted the attention of leading adult educators in the corn-belt states.

Geo. A. Hormel & Co., located at Austin, slaughters approximately a million hogs yearly for foreign and domestic consumption. The city of Austin has a population of 20,000, and unemployment is an unheard of phrase in this meat-packing center.

The educational program has been carried on in five community centers tributary to Austin. Corn and hog meetings were held weekly for three months during the winter under the supervision of the adult evening school instructor.

Chief swine raising jobs discussed at these meetings were: planning the swine herd; selecting the breeding stock; care of sows before, during and after farrowing; care and feeding of pigs; fattening hogs; feeds for swine; swine sanitation, parasites and diseases; factors affecting farm prices of hogs, and consumers' demands for pork.

Three general meetings were held at Austin in which all communities assembled to discuss common problems. Four hundred adult farmers enrolled in these meetings. At the concluding meeting in each community, a panel discussion was held, participated in by a farmer, banker, packer, butcher and housewife.

As an outgrowth of these discussions, 70 swine raisers are carrying on a supervised sow-testing program in conjunction with the high school agricultural department. The ears of 3500 pigs were notched at birth or shortly afterward and have been recorded so as to retain the litter identity. Fifty-six day weights are taken of the pigs so as to gauge the growth impulse they possess. Barrows from litters in which rapid growing gilts are retained for breeding purposes are slaughtered by the packing plants so that producers may know the real cut-out value of their foundation stock.

Eager, sometimes heated discussion.

Senior Guidance at Santa Barbara

E. LOUISE NOYES

BY THE time pupils reach the senior year they usually are conscious that they are facing many problems, both personal and community. Therefore, high school senior guidance work at Santa Barbara, Calif., is concerned with both individual and group guidance. Attempt is made to help each senior attain full status as an individual and as a member of the community.

The chronology of the senior year more or less determines the course of the guidance. The first step is a conference with each senior regarding his status as a senior. From the registrar each pupil gets a check sheet which tells exactly where he stands with regard to graduation. On it he finds his scholastic credits, his citizenship rating, the state of his "major" and state and local requirements for graduation.

Usually these items are found to be in order, but an early conference starts the senior on his way certain that the program he is following is giving him what he wants. In case his plans have been changed or in case he has failed to take care of some requirement, there is still time for him to straighten it out and get on the right track. This conference also gives the senior counselor an opportunity to get acquainted with pupils whom she does not already know.

Early in the year one of the various personality inventories is given to the whole class and through the remainder of the year these check sheets are used as a basis for individual conferences. Groups who prefer to discuss their inventories together are permitted to make appointments for conferences. It is necessary, of course, to keep these on a constructive basis but this is possible if one stresses the fact that such inventories are by no means a final judgment. Almost any of them furnish many possibilities for constructive discussions of desirable personal traits and for traits that are necessary for the type of work that the pupil means to enter.

One interesting attack has been to ask the pupil what questions on the inventory seem absolutely foolish to him (there are always some, no matter what inventory is used) and then to make him see what bearing the particular question has on personality. Pupils are interested also in seeing where they rate with regard to the standardized norms for age and sex.

The senior counselor is given two afternoon periods for this work and

seniors soon learn that she is also to be found in her room early in the morning and after school, when they are welcome to drop in for informal discussion of their problems.

In addition to the personality inventories the counselor tries to have on hand copies of some of the various vocational aptitude tests so that anyone interested may take one of them and check his general aptitude for the vocation in which he is interested. There are good ones, to mention only a few, for art aptitude, selling ability, clerical ability and for medical and engineering skills.

One of the most important pieces of guidance is done in sex education by the principal and by the dean of girls. This subject is touched on briefly and simply in the sophomore year by two of the group guidance workers, but it is done with the seniors on the level of their maturity, as a problem that is vital to every one of them, both now and in the future.

All the discussions are kept on a scientific and unemotional plane but no words are minced in dealing with the problems of sex. The talks with the girls consider the place of sex in a happy and wholesome life, the joy that right ideals can bring and the grief that cheapness can bring in its train.

Nearly every senior girl is beginning to think seriously of her home and to plan toward it; she is tremendously interested in the things that make for a happy marriage and a real home; she is only too glad to have someone discuss such problems with her. Her attitude toward the opposite sex is often the biggest thing in her life at this time and any help that the school can give is well worth all the time and effort that it takes.

A question box plan is used for the final meeting so that the pupils have a chance to bring up impersonally their own personal perplexities if the preceding discussions have not already answered them.

A group of boys in discussing this work this year suggested that one of the biggest problems, that of constructive social planning for a better world, could not be brought up because there was not time enough for everything in the periods that could be given to the work. The same boys had a suggested solution, which the principal is considering for the coming year. The idea is to divide the boys into two groups by means of a simple scientific questionnaire which would show quickly which of them had received instruction in their homes and which had mistaken ideas of the simpler problems of sex. It would then be possible to take the boys with more advanced knowledge and let them spend time discussing the broader social implications of the whole matter of sex and its place in each person's life. The same plan easily could be followed with the girls if the girls wished it.

Reactions from parents and from pupils now graduated give evidence that the work done in these groups is well worth while. In former years these talks have been given over a period of several weeks during the twice-a-week homeroom period. This year the experiment was tried of taking the seniors out of regular classes, a different period each day for three days, thus giving longer discussion periods and in many ways focussing the work better. Next year it will probably be done the same way except that the present plan is to have five periods instead of three. Santa Barbara High School feels that much better results are obtained from these talks than from the old type of "high pressure salesman," so to speak, who was brought in for one emotional day.

The senior counselor at Santa Barbara High School outlines a program that is sending graduates out into the world adjusted socially and vocationally

The old bugaboo of social usage, what to do, when to do it and how to do it graciously, is even more of a real problem to seniors than it is to sophomores. In the senior year it is easy to find genuine approaches for discussion. The local college every year gives a tea for the high school senior girls. Usually a number of private teas are given during the commencement season. The Girls' League gives a tea for all senior girls and their mothers every year. Even the boys find themselves at formal parties during the senior year, climaxed by the after-commencement party given for seniors by the P.-T. A.

One way that Santa Barbara High School handles this problem is to have one of the home economics teachers give a talk during which she demonstrates how to accept tea and how to act around the tea table. She does all this, talking in casual friendly fashion as she demonstrates, thus helping the youngsters absorb a great deal of information without realizing that they are being taught something.

Commencement! And that means clothes! In Santa Barbara the seniors themselves decide each year what the type of graduation dress is to be. Although each year for years it has ended by selection of the white dress for girls and the dark coat and white flannels combination for boys, each class discusses at length what is and what is not good taste for an informal 6 o'clock graduation before the decision is reached. Shoes, collars, coats, trousers, ties, jewelry, dresses, hosiery, hairdress, all these come up for eager, and sometimes heated, discussion.

During the second semester of the senior year both the principal and the senior counselor have conferences with each graduating senior. Usually it is easy to find an opening for the talk and the seniors themselves often have some problem that they are glad to discuss when the opportunity is given.

Second semester conferences generally center around the pupil's plans for the future. An effort is made to keep them unhurried, though this is often difficult when days are full. Each year, also, some of the prominent men in town, those who really have something to say to late adolescents, are asked to come and talk to the seniors at special assemblies of the senior class. Youth always respect men who speak with authority and who respect their hearers too much to talk down to them. Such speakers do much to advance the guidance program in Santa Barbara High School.

Ashland Goes Liberal

C. L. ANSPACH

THREE years ago the board of trustees of Ashland College, Ashland, Ohio, and a committee of citizens from the city of Ashland decided that it would be well if the college faculty surveyed the institution and, if possible, undertook a constructive reorganization program.

While the college has served well the Brethren Church, the denomination with which it is affiliated, and the city of Ashland for a period of fifty years, it was thought that an appraisal would indicate the weak points in the institution's educational program.

A faculty committee, known as the institutional study committee, was appointed and it initiated a complete survey of the institution. Dr. Ira M. Smith, registrar of the University of Michigan, assisted in directing the study. This committee gave itself to a study of administration, instruction, personnel, finance and other phases of a college program. After a year's study, the dean of administration, Michigan State Normal College, Ypsilanti, was called to the presidency of the college.

It was the feeling of all groups interested that (1) the institution should remain a liberal arts college; (2) its program should be student centered, which would involve not only the cultural, but also the personal, moral, physical and vocational development of each student; (3) it should give attention to vocational counseling, and (4) it should utilize all the factors in the community that could be made to contribute to the general development and welfare of the students.

Conscious of these objectives, the Ashland plan was formulated. The plan is organized around four basic educational principles, not new in themselves, but brought together in a plan that is new in emphasis. These four basic principles, which constitute the framework of the institution's educational philosophy, are:

1. Education is a matter of growth and development of the individual. The college must plan the program of development for each student in terms of his growth possibilities and within the limit of time set by his length of residence. Achievement, therefore, is not measured in terms of credits and hours but in terms of student development.

2. Individuals develop at varying rates. The rate at which an individual can grow is just as important as far as the educational process is concerned as the possible limit of growth.

The new president of Ashland College describes its self-appraisal program and subsequent liberalizing of liberal arts course

3. The variation in rate of growth is governed by several factors, which include inherited abilities and differing experiences. Students vary tremendously in ability to deal with instructional materials. They are handicapped or accelerated by experiences that they have had in the home, school, church and industry. These differences need to be considered in planning a student's development.

4. The educational process is not confined to the classroom or to an institution. Experiences that pour in upon the individual may be educative or uneducative in effect. Experiences are educative when they tend to develop an individual in such a manner that he is a better person because he has had these experiences. Uneducative experiences are those that tend toward degeneration or retardation of the individual's growth. Experiences obtained outside the classroom are just as vital as those obtained within the classroom.

These four principles are made effective through the following procedures and devices:

Student Analysis and Counseling: A detailed analysis is made of each student involving levels of achievement in various basic subjects, capacities and abilities, personality, disabilities, social attitudes, religious attitudes, physical disabilities and vocational leanings. A pattern-map is made of each student, showing the "highs" and "lows" in his current behavior pattern. It is the aim of the various advisers to assist the student to grow, using the personnel materials and the pattern-map as guides.

Individual Attention: All instructors are furnished personnel data on each student which indicate the achievement of the student and a prediction as to possible success in college. With this information at hand he is conscious of the varying abilities of his students and adapts the instruction to their level and interests.

Curriculum Enrichment: Survey courses are offered during the first two years of the college course for the purpose of rounding out educational backgrounds. A reading list, including references to the outstanding books of all periods, is furnished students. The comprehensive examination, given at the close of the sophomore year, tests the thoroughness with which the student has done this reading.

Lower and Upper Division Work: The college is divided into a lower and upper division, each constituting two years of work. The work in the lower division is for the purpose of furnishing a broad cultural foundation and establishing the skills necessary to successful achievement in the upper division. Students are admitted to the upper division when they show they are capable of doing upper division work.

Auxiliary Educational Agencies: A program of cooperation with industrial, professional and social groups is provided in order that the

student may have the benefit of such experiences as these groups may offer. Students in preparation for teaching are given experience in department stores, business houses or professional offices. A premedic student is given experience in a store, a factory and a social agency. No student will be graduated without activity points earned by participation in such groups.

Vocational Experience: Every student must participate in vocational experiences. There are two types of units: the "industrial unit," or pay job, and the "participating unit," or nonpaying job. The industrial unit involves approximately half-day work and, therefore, the cooperating industry or business organization pays the student. The participating unit involves only a few hours a week and, therefore, does not justify a remuneration.

The purpose of the vocational units is (1) to introduce students to a number of work experiences and to emphasize the qualities and traits necessary to success in vocational fields, and (2) to furnish a number of tryout experiences in vocational fields. No student can be graduated who has not participated in the vocational units.

The college as a liberal arts college has gone liberal, not so much in the curriculums as it has in emphasis on individual development and vocational experience. It has gone liberal in that it believes a liberal arts college must use its instructional materials in the giving of a cultural education that will have meaning in a vocational sense.

The program has not been in operation long enough completely to appraise it, but certain definite ends have been achieved. Among these are:

1. A better understanding on the part of the student of educative forces, for he is now conscious of definite individual weaknesses, definite abilities and achievement objectives.

2. Better classroom teaching, for each instructor has information as to the levels of achievement of individual students and is able to adapt instructions to needs and abilities.

3. A correlation of community activities with the college program. As an example, all the music activities in the community have been placed under the direction of one head. The head of the student music activities at the college is also in charge of the music activities in the high school and directs a community chorus.

A community symphony orchestra of 75 pieces has been organized. At the first concert, the orchestra was supported by a choir of 110 voices made up of the college a cappella choir, the high school a cappella choir and the community choir. Ten guest artists from the Cleveland Symphony Orchestra assisted. The second concert brought to the city Paul Althouse of the Metropolitan Opera Company. This activity is now underwritten by one of the city's residents.

The city has cooperated with the college in an unusual manner. It already has given $180,000 in buildings and ground improvement. A student loan fund was established by Dr. Gilbert C. Hess for worthy students, which now amounts to approximately $135,000. In addition, friends in the city are giving approximately $15,000 a year to the current budget. This interest in the new program is aiding materially in making the program a success.

4. Faculty interest in improving the personnel service and the instructional activities of the school. Arrangements were made with Dr. B. L. Stradley, dean of the college of arts and sciences of Ohio State University, to direct an improvement program. He was assisted by Dr. W. H. Cowley, Dr. W. W. Charters of Ohio State University, and Dr. J. E. Bathurst, fellow of the General Education Board.

This program already has resulted in a reorganization of the administrative and personnel functions of the college. The instructional program is now being studied and reorganized by Doctor Charters.

5. A vocational consciousness on the part of the students without sacrificing the broadening cultural program of a liberal arts college.

By the organization and execution of a new program, a liberal arts college has gone liberal and, thereby, has found for itself a new life.

Remedy for Cheap Reading

FULLY 90 per cent of the older high school pupils read "pulp" magazines to some extent though less frequently than boys and girls a few years younger, according to Anita P. Forbes of the Weaver High School, Hartford, Conn., speaking before a recent meeting of the National Council of Teachers of English.

These magazines are less of a menace to the pupils' morals and English than to their minds, she declared. "There are three reasons for the appeal of the cheap magazine; it affords thrills, it helps while away idle minutes and it requires no mental effort from the reader.

"The third fact is of the most concern, for good books demand the cooperation of the reader. How is that habit of active perception and appreciation to be formed in minds accustomed to finding entertainment without exercise? What chance of happiness will young people stand if they have no mental armor against a highly complex and utterly unpredictable world but the notions gained from sentimental stories?

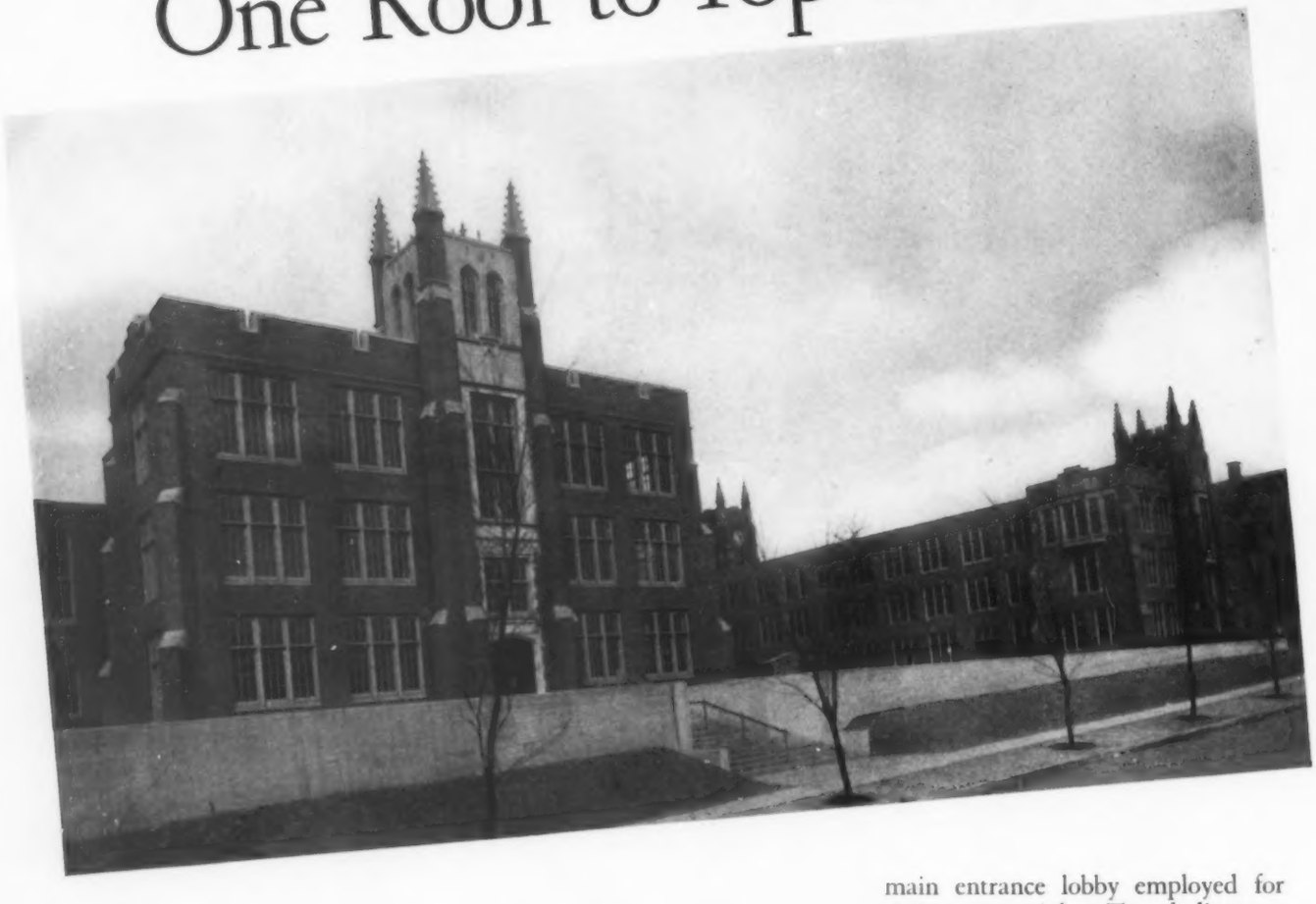
"Through the reading of good books, fiction and nonfiction alike, pupils may be led to face facts squarely and with courage. The best writers will show them the beauty of inner rather than outer victories, the value in defeat, and the challenges offered to man by the universe. By contrast with such literature, pulp stories eventually become tasteless.

"To combat cheap magazines, make a magazine project part of the program for each year in the senior high school; select different and more mature magazines each year; increase the school library fund for magazines. Lead young readers gradually and pleasantly up to nonfiction by offering reading that does not make too heavy demands at first, by calling attention to articles of interest and by making use of material that is attractively illustrated."

● Diffused daylight on the stairway adds to safety and architectural appearance in the schoolhouse at the rural resettlement project at Greenbelt, Md.

THE SCHOOL PLANT

One Roof to Top It All



THE La Salle Peru Township High School and the La Salle Peru Oglesby Junior College are housed in a building the second unit of which was completed in March 1937. This second addition made it possible to wreck the old high school building and to use the site as a parking space.

All the high school and junior college activities are now located under one roof except the boys' gymnasium and the swimming pool, which are housed in a separate building across the street and east of the main building. The ultimate plant includes a third unit that accommodates gymnasium and pool.

The school site includes a large recreation field for football practice, baseball, track and tennis. In addition the school has a gridiron and a concrete stadium with a seating capacity of 4000, located to the west of the recreation field in a valley which makes a natural amphitheater for the gridiron and stadium.

The first unit of the school was erected in 1928 and included a large memorial auditorium, classrooms and administrative offices. The exterior was executed in the Collegiate or Oxford Gothic style, in brick and stone. The total cubage of this initial structure was 1,021,340 cubic feet, at a unit cost per cubic foot of 49.8 cents. The second unit has a total cubage of 1,240,944 cubic feet and cost 36.3 cents per cubic foot.

A glance at the floor plan shows a modified "E" arrangement of classrooms around a court, 140 feet wide, with a commodious library at the center and such activity rooms as auditorium, little theater, cafeteria, study hall, gymnasium, music and band rooms, household arts and other noise centers located at the back or the spine of the "E." Thus, they are grouped together advantageously for night use and, at the same time, are readily accessible by day from both academic wings.

The central location of the library identifies it as the heart of the school by day, and it is directly opposite the main entrance lobby employed for civic use at night. Travel distances therefore, are reduced as much as possible in a large school.

The building is fireproof, with floors of a resilient floor tile in a variety of colors, suited to the activity in the room—blue and gray in corridors; brown, tan and reds in classrooms; green and gray in the foods and textiles laboratories; blue and gray in rhythmic design for the music rooms, and black and white in the library.

Color has also been introduced extensively in the walls and ceilings of the interiors. A black ceiling, red brick and stone walls and colored terrazzo floors enliven the main lobby, which also accommodates on two sides parts of a processional frieze modeled from the Acropolis at Athens. This frieze, in a sadly ruined state, adorned the walls of the old building. Striking blues and greens are used in the music department while the classrooms are treated in a more conventional tone.

The location of the study hall-cafeteria makes possible its use as a

large club or banquet hall at night; it is readily accessible from the future gymnasium. One entire wall of this room is lined with canvas covered plywood for the exhibition of an extensive school collection of oil and water color paintings, etchings and lithographs as well as traveling exhibits from art foundations. The ceilings of this room and of the little theater and music rooms are acoustically treated in special designs.

The square plan of the library with glass panels to all conference rooms makes supervision more efficient and economical. Conference rooms are also directly accessible from the corridor for special groups and these doors may or may not be used, as desired. Shelving is provided for 20,000 volumes. The library is known as the Thomas J. McCormack Memorial Library honoring the man who was superintendent of the high school and junior college for many years.

The girls' gymnasium, planned on modern lines, has a corrective room, commodious locker room, unique shower space with barrel vaulted glazed brick ceiling, complete instructor and health offices, and spectator or classroom balcony space. Special study has been given to connect this department with future lockers for the pool so as to place both under the same general supervision.

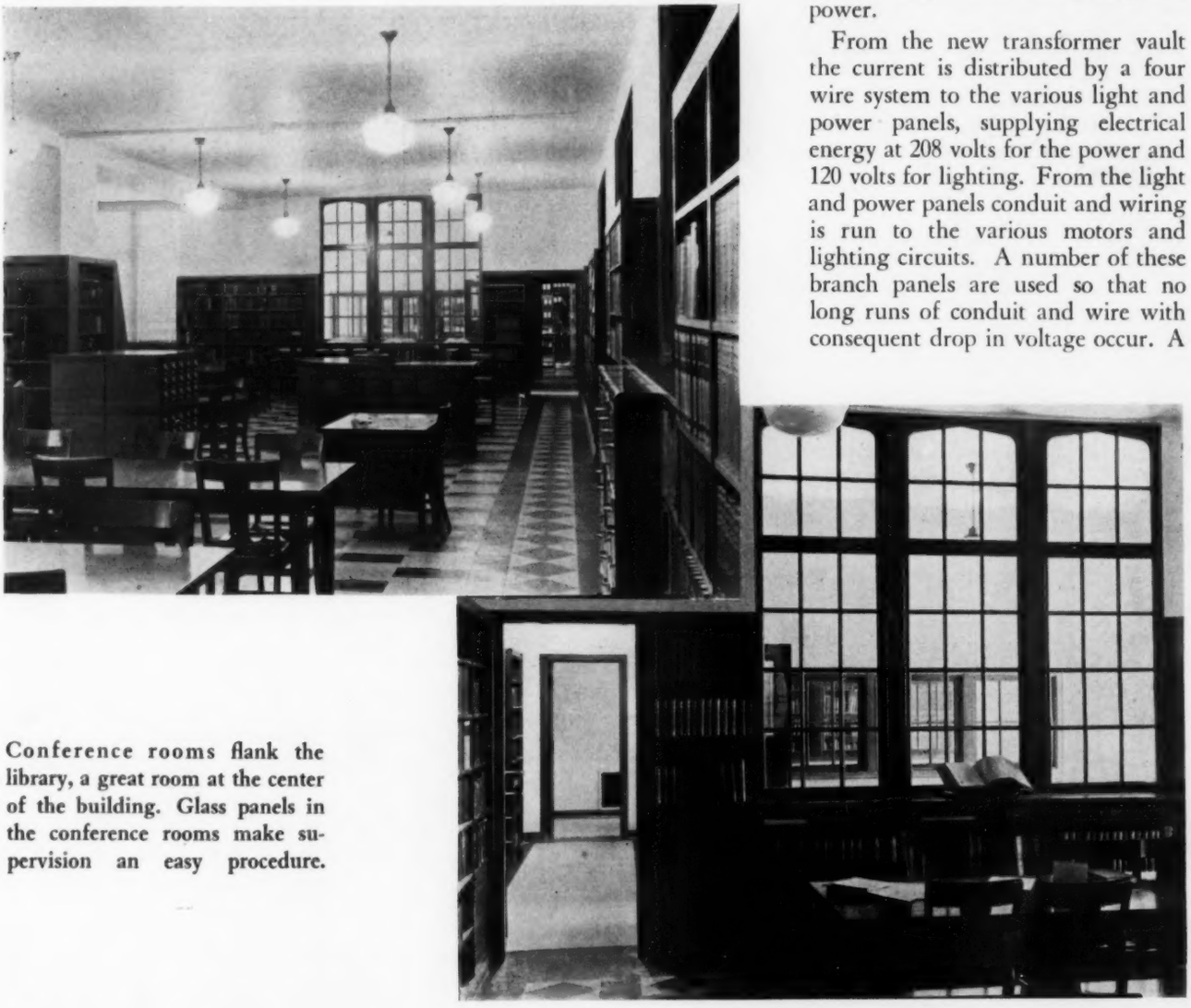
A large physics laboratory, including storage and dark room space, motor generator room and classroom space adjoining the demonstration desk, completes the science group in the first unit. A general science room adjoins this laboratory.

Two art rooms with central storerooms are found on the top floor. Four rooms comprise the commercial department, located in a unit above the library. A large freight elevator provides easy transit for large band instruments to the auditorium stage.

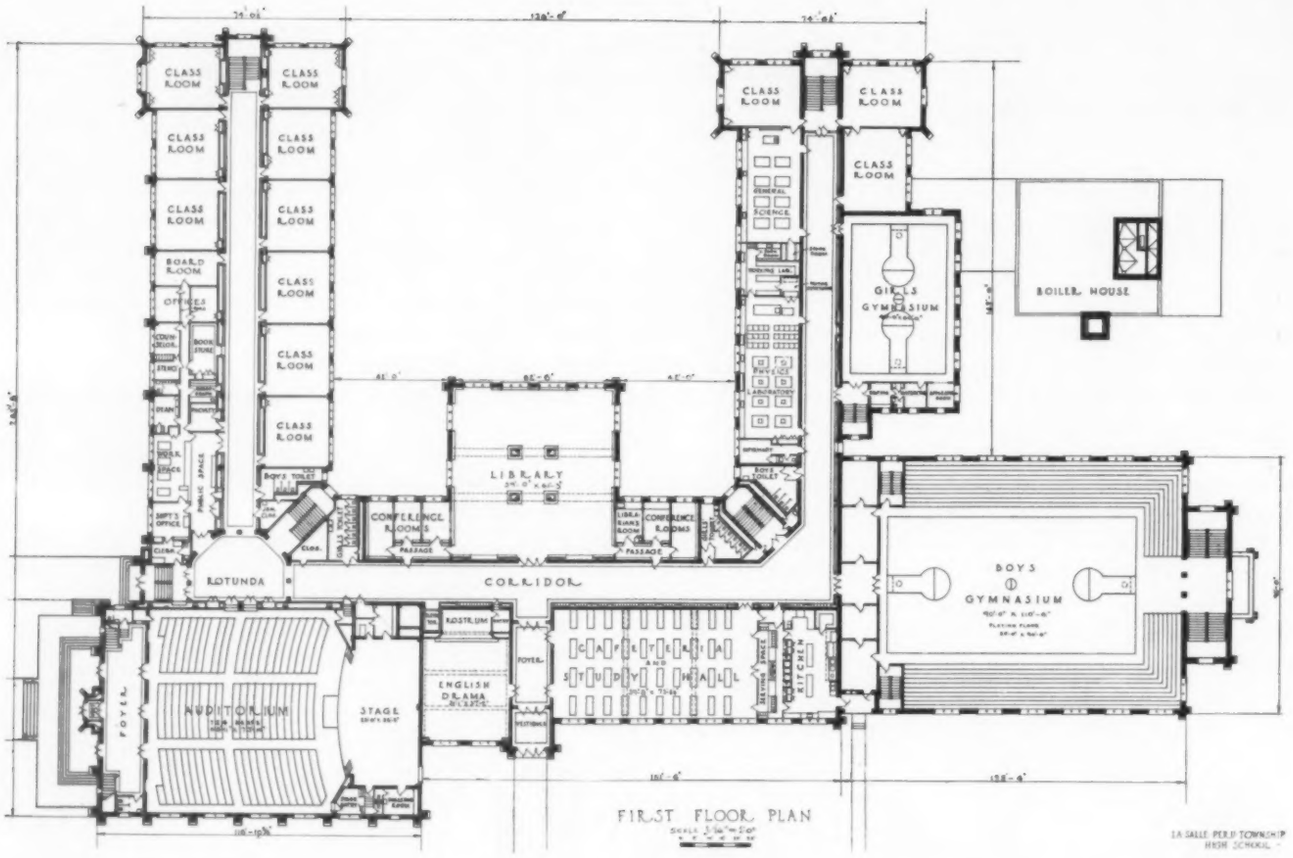
The auditorium, 74 feet wide and 70 feet deep, seats approximately 1500 and is outstanding for its interior decoration, its English traceried ceiling of the 17th century and its elaborate proscenium arch and frieze enrolling the celebrated of all time.

All electric wiring in the building is installed in metal conduits. Two main service feeders enter the building underground at high voltage and go to two transformer vaults where the current is stepped down to the lower voltages used for lighting and power.

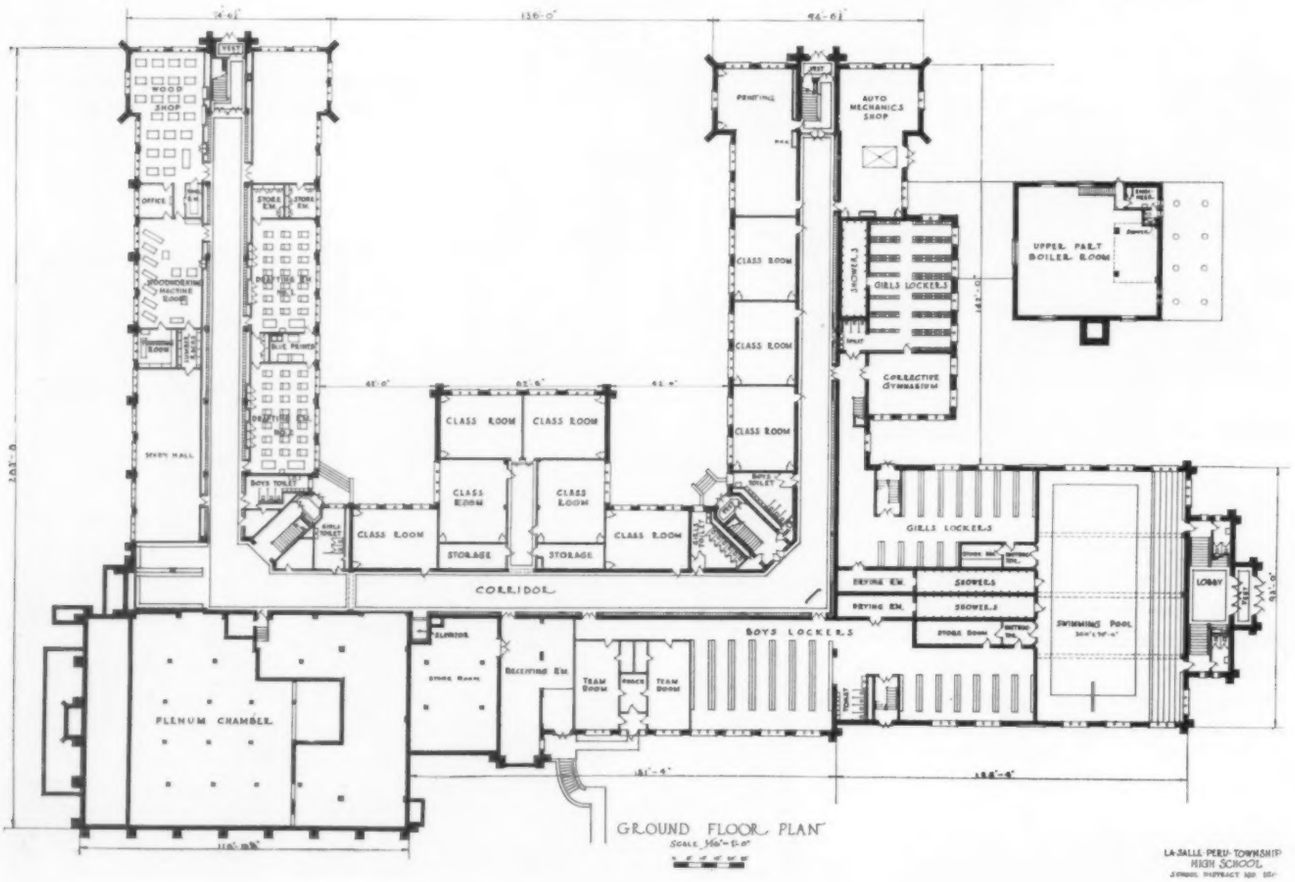
From the new transformer vault the current is distributed by a four wire system to the various light and power panels, supplying electrical energy at 208 volts for the power and 120 volts for lighting. From the light and power panels conduit and wiring is run to the various motors and lighting circuits. A number of these branch panels are used so that no long runs of conduit and wire with consequent drop in voltage occur. A



Conference rooms flank the library, a great room at the center of the building. Glass panels in the conference rooms make supervision an easy procedure.



Architects for this great school plant are Childs and Smith of Chicago. The second unit has recently been erected and a third, containing boys' gymnasium and swimming pool, is for future development.



separate system of conduit and wiring, independent of all other services, is run to the emergency and exit lights in the corridors and auditorium.

Lighting fixtures in classrooms are of the direct type with enclosing globes, designed to give from 12 to 15 foot candles of light at pupils' desks. Lighting fixtures in the sewing room are of three layer glass, the middle layer being bluish to give a daylight effect. Fixtures in shower rooms and on the exterior of the building are of the marine type with vaporproof globes that will not be affected by moisture.

Murals in the library are illuminated by concealed reflectors and the stage in the English drama room is provided with overhead border lights.

A central clock system in installed; in connection with the master clock is a program device arranged to ring the bells in the corridors for change of classes.

A central fire alarm system has break glass stations at several points on every floor and an alarm turned in at any station will ring all fire gongs in the building. A test station is provided in the principal's office for use in conducting fire drills.

The kitchen is completely electric, all ranges, urns, steam tables and ovens being electrically heated.

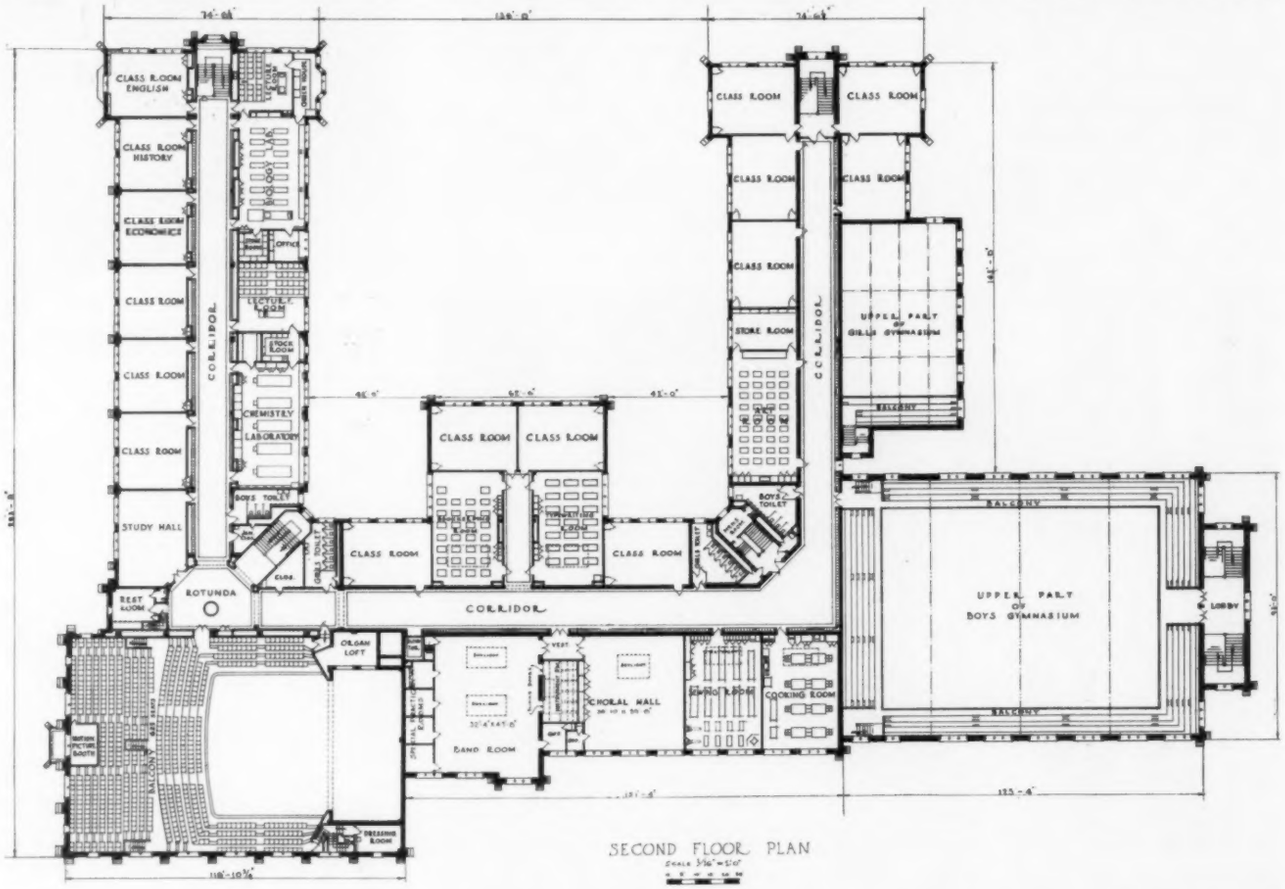
The heating system is low pressure steam using a vacuum system of steam circulation. Steam is generated at low pressure (not more than 12 pounds) in three large steel boilers using local coal for fuel, fired by automatic stokers. The coal is dumped from wagons into the storage bin at the boiler room level and is lifted by a bucket type of elevator to overhead coal bunkers; from the bunkers the coal slides to the stoker hoppers by gravity. The same elevator is used to lift the ashes, a diverter spout at the top allowing ashes to be delivered to one bin and coal to another as desired.

The steam mains in general are in a large tunnel under the ground floor corridor. This tunnel is sufficient in height for a man to walk upright, and other service piping such as water mains and electric conduits is run in it.

Each room is provided with one or more cast iron radiators hung on the wall beneath the windows, leaving the floor free for cleaning. The amount of steam supplied to these radiators is regulated by thermostats, located one in each room, generally adjacent to the door. Supply ventilation is provided for all principal rooms from a large central fan, which draws the air over heating coils to warm it and through an air washer to clean and moisten it. Mechanical exhaust ventilation by motor driven fans and duct work is provided for such spaces as toilets, locker rooms, shower rooms and kitchens, the air being discharged out of the roof through ventilators.

The larger sizes of steam piping were welded so that the main becomes one long continuous pipe.

A rapid circulation of steam to all parts of the heating system is obtained by the use of two vacuum pumps which operate to produce a suction on the return piping from



Noise centers are grouped and occupy the space remote from classroom areas. Science laboratories occupy one section of this floor.

the radiators; these enable the steam to rush in and fill all parts of the heating surface. The water resulting when steam condenses in the radiators flows to these pumps and is discharged back to the boilers.

The heating system is designed to maintain the building at 70° F. when the outside temperature is 10 degrees below zero, except for special rooms, such as lockers and showers which are to be heated to 80° F. under the same conditions.

Plumbing fixtures are of the most modern and sanitary type. Drinking fountains are of china with angle stream bubblers, so that no water can fall back on the inlet after touching the lips of the person taking a drink. Lavatories, water closets and urinals are of vitreous china, impervious to moisture. Enameled iron sinks are installed in shops, laboratories and similar places. The showers used in the boys' and girls' shower room are of a special type rigidly attached to the wall.

All piping used for hot and cold water is genuine wrought iron, galvanized, and is insulated. Branch lines from the mains are provided with valves and the valves are numbered with brass tags indicating the portion of the building supplied.

Two main water supplies run into the building. One is connected to the Peru water mains and is used principally for hot water; the other is connected to the La Salle water mains and is used for cold water to lavatories and showers. There is a third supply from a pumping plant located in the building, used for flushing water closets and for sprinkling lawns. In making the excavation for the building, a reservoir, said by older residents to have been the original water supply for La Salle, was discovered. It was decided to make use of this water and a small pump and pneumatic storage tank were installed.

At the top is shown a section of the physics laboratory and recitation room; just above is the commercial room, which is both side and sky lighted.

The Collegiate Gothic entrance.

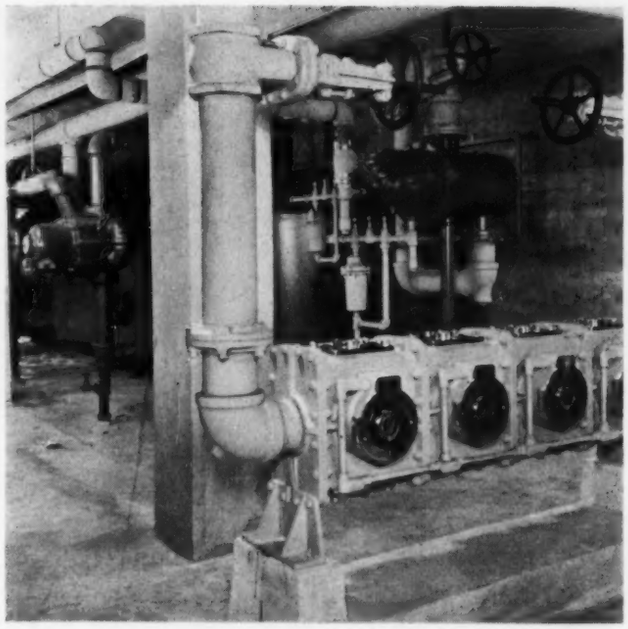
Hot water is heated in a tank in the boiler room and is circulated to all fixtures using hot water, such as lavatories, showers, sinks, slop sinks and kitchen equipment. A small motor driven pump constantly circulates a small quantity of water so that hot water is quickly available at the most remote faucet.

Roof drainage and waste from plumbing fixtures are run by gravity to the sewers in the street, cast iron pipe being used inside the building and vitrified tile pipe, outside. Drainage from the boiler room, pipe tunnels and other areas too low to be run to the sewers is connected into a sump in the boiler room and is lifted by a pump and discharged into the main sewer.

The building as it now stands contains 53 instructional and 12 noninstructional units. Childs and Smith, Chicago architects, designed the structure.

Rules for Pools

FRANCIS R. SCHERER



A view of the filter room, located under the pool deck. In the foreground is the sterilizer; directly behind it is the heater. The three filters are shown in the background.

IN THE Rochester school system, Rochester, N. Y., each high school having a swimming pool has its own laundry for the care of towels and suits. The board provides gymnasium suits and towels for boys and girls, and swim suits for girls only, the boys entering the pool naked. Each pupil pays 25 cents a semester for use of a combination padlock for his gymnasium locker, towels and swimming and gymnasium suits. Towels and swim suits are laundered after each usage. A gymnasium suit is assigned to each pupil for an entire semester and is laundered about three times during that semester.

In the belief that the most accurate control could be obtained thus, a scheme recently was adopted placing the operation of the pool at each of the eight high schools under a three-person committee consisting of the head of the school's health education department, the head of its science department and the engineer-janitor of the school.

Recently the operating procedure with reference to the introduction of alum and sal soda into the water as it enters the filters was modified. Previously these chemicals were fed continuously into the water during recirculation but under the modified method, which to date appears to have some advantage over the former, the gelatinous bed or floc is built up on the filter immediately after backwashing by opening wide the alum valve and controlling the sal soda valve so as to maintain the *p*H. somewhere between 7 and 7.6.

This process, requiring between one and two hours, continues until the differential gauge indicates approximately 2 pounds at which time the supply of chemicals is valved off. So far it has been found unnecessary to introduce additional chemicals during the period in which the back pressure rises from the 2 pounds to 5 pounds at which point it has been found desirable to backwash. Although the frequency of backwashing depends almost entirely upon the pool load, it has been found that the newer method saves considerably over the previous requirement for compulsory backwashing at the close of each day.

Cloudiness of pool water is usually due to faulty control of the *p*H., *i.e.* to the incorrect proportion of alum to sal soda. It is objectionable since it gives the impression of an unclean pool and also makes it increasingly difficult to observe the persons in the pool.

This condition is carefully watched and immediately after any cloudiness appears, necessary tests are made and remedial measures taken. Sometimes the cloudiness indicates an excess of alum in the pool water, which produces an after-precipitation. This condition, however, is greatly minimized under the new control method.

While the cost of operating a swimming pool throughout the school year will vary in different localities, it might be estimated that such cost will be upward of $5000 a year. This will cover the cost of the water, not a large item, since once the pool is filled it is continuously recirculated and the additional consumption represents the make-up water used each day.

A sizable item is the cost of power to drive the recirculating pump. There are the additional costs of warming the water as it enters the pool, of warming the natatorium and of sterilizing the water at regular intervals.

Man-labor is needed for the daily cleaning of the natatorium and for the weekly cleaning of the pool itself. There is also the cost of repair and upkeep of equipment and of the natatorium proper.

The Rochester Board of Education has issued in pamphlet form the rules and regulations for the control and operation of the swimming pools and has placed these in the hands of all persons in the school system who have to do with the use or care of the pools. Put into effect Feb. 2, 1937, these have proved to be an important factor in bringing about satisfactory results. As adopted and amended, they are as follows:

SECTION I—Temperature of Air and Water in Natatorium.

Water: not lower than 70° F. or higher than 74° F.

Air: not lower than 70° F. or higher than 77° F. Within the limits stated, the air temperature must be not less than 3° F. or more than 5° F. warmer than the water temperature. A water temperature of 70° F. and air temperature of 75° F. are recommended.

SECTION II—Sanitary and Chemical Qualities of Pool Water.

Bacterial count on agar; twenty-four hours at 37° C.: average count per month not to exceed 250 per cc.

B. coli: not more than 2 out of 5

The natatorium at the Charlotte Junior-Senior High School, Rochester, N. Y., showing the spectators' balcony in the background. Pools in the eight high schools are supervised by a three-person committee.

ten cc. portions shall show a positive partially confirmed test.

Residual chlorine in the chlorine pools: not less than 0.3 parts per million and not more than 0.5 parts per million.

Residual chlorine in the chlorine-ammonia pools: not less than 0.7 parts per million and not more than 1.0 parts per million.

Free ammonia in the chlorine-ammonia pools: less than 0.2 parts per million of added free ammonia. The water in these pools shall be diluted with fresh sterile water when the pool water contains more than 1.0 parts per million of free ammonia due to pollution.

Alkalinity: *p*H. shall be 6.8 to 7.6.

Residual alum: not more than 0.3 parts per million, preferably 0.1 parts.

Sampling: at least one sample per week from each pool in use. Additional samples shall be taken if the bacterial count exceeds 500 per cc. at any time, or if the positive partially confirmed test for B. coli exceeds the minimum.

SECTION III—Permissible Bathing Load.

The sanitary and sterilization equipments in connection with the pools must permit under the state sanitary code of the number of bathers during any one hour of the day or evening designated as the maximum class size.

SECTION IV—Inspection of Bathers.

1. Bathers are required to visit the toilet before taking a shower or entering the pool.

2. Every bather without exception must take a soap and hot water shower in the nude before entering the pool. A personal inspection of each bather by the teacher must be made to see that a complete soap bath has been taken. It is advisable that everyone take a cold shower upon leaving the pool.

3. Each bather, before entering the pool, must be carefully inspected by the teacher in charge and no one allowed to enter when there is evidence of colds, skin diseases, sore or inflamed eyes, mouth, nose or ear discharges, menstruation, athlete's foot, or any communicable or infectious disease.

4. Each bather must walk through the disinfecting foot bath and then through the running water foot bath before entering the pool.

5. The use of pools and inspection of bathers shall be under the direct supervision of a health education teacher, except in the case of girl and boy scout groups using the pool. When scout groups use the pools, a qualified swimming instructor shall be recommended by the city scout executive and approved by the director of health and physical education. Such instructor shall enforce all sanitary rules outlined herein.

6. No adult shall be permitted to use the pool without first presenting a doctor's certificate of examination at the beginning of each semester, or more often if required by the superintendent of schools, stating that the adult is free from any infectious or contagious disease and is not suffering from any organic or functional disorder that would be dangerous or detrimental to health, and that the adult may take swimming. Adults must also comply with all other provisions of these rules and regulations. This certificate must be kept on file at the health education office in the school by the teacher in charge of class.

SECTION V—Cleanliness of Pools and Natatorium.

1. Each instructor shall go barefoot or wear a pair of wooden or rubber sandals when in the natatorium. These sandals shall be worn in the natatorium only. Instructors must walk barefoot through the disinfecting and running water baths just as the pupils must.

2. No articles of clothing of any kind other than the regulation bathing suits and caps shall be worn in the pool water.

3. Only board of education suits properly washed, sterilized and dried may be used by persons going into the pool.

4. No cosmetics of any kind shall be put on the face or body when going into the pool.

5. No pins, hairpins or other hair fasteners shall be worn.

6. No person with cuts, open vaccinations or bandages of any kind shall go into the water.

7. No bather shall put cotton in his ears. Approved rubber ear plugs may be used.

8. No spectators, visitors, attendants or other persons shall be allowed to enter the natatorium (except the spectators' balcony) without putting on the rubber boots provided for that purpose. The teacher in charge must enforce this rule.

9. Rubber foot baths containing a fungicidal solution of adequate concentration to serve as a preventive

against ringworm shall be provided at suitable points and used as directed by the instructor.

10. Urinating, expectorating or blowing the nose in the pool is prohibited.

SECTION VI—Safety Precautions.

It shall be the responsibility of the head of the department of health education in each school to enforce the following:

1. A swimming test shall be given to each person on entering the pool. All bathers unable to swim may use the shallow end of the pool only.

2. The following approved swimming caps must be worn by all girls: red caps for beginners, green caps for intermediate swimmers and white caps for advanced swimmers.

3. Yelling, running, pushing or throwing persons into the water and running or scuffling on the pool deck or diving board is prohibited.

4. Diving or jumping from galleries or windows is prohibited.

5. A competent instructor shall always be on duty when the pool is in use. No bather shall enter the natatorium unless an instructor is there. Doors to the natatorium must be kept locked at all times when the instructor is not present.

6. Two-ring life buoys, with sufficient rope attached, shall be placed on the walls and used only in case of emergency. The life buoys must be tested once each month while the pool is in use.

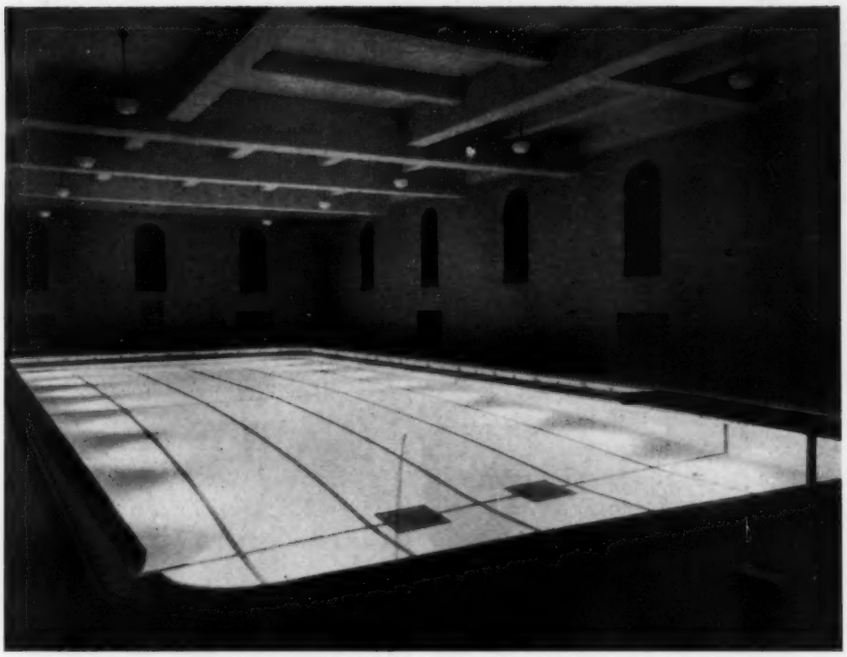
7. A long shepherd's crook and at least four bamboo fish poles not less than 20 feet long are to be on hand in the natatorium.

8. Each bather must have a "buddy" (partner) who must give the alarm when his or her companion is in need of assistance.

9. Seventy-five bathers shall constitute the maximum size of class. There shall be one instructor for each class of 35 persons. Classes of from 35 to 75 require two instructors.

SECTION VII—Tests and Records.

1. The head of the health education department at each school having a pool shall make daily records on Form San. 48 of the New York State Department of Health, showing the following: (a) number of bathers; (b) new water added in gallons; (c) daily period that pump and filters are operated; (d) when the filters are washed; (e) when the pool is cleaned; (f) amount of ammonia added; (g) amount of chlorine added; (h) residual chlorine; (i) amount of alum added; (j) amount of soda ash added, and (k) *p*H. value.



Only the underwater lights are burning in this view of the pool at John Marshall High School, Rochester. Cost of operating a pool throughout the school year has been estimated at approximately $5000.

Item a shall be obtained from the swimming instructor. Items b, c, d, e, f, g, i and j shall be furnished him by the engineer-janitor. Items h and k shall be furnished him by the head of the science department at the school.

2. This form, which is for one calendar month, shall be mailed to the specialist in science immediately after it has been filled in for the last day of the month. A copy shall be retained in the files of the head of the health education department at the school.

3. The specialist in science shall forthwith transmit two copies of these data to the Rochester Bureau of Health and one copy to the superintendent of school buildings.

4. All sampling, tests and records provided for in these sanitary standards shall be made under the direction of the specialist in science. Chemical and bacterial analyses shall be made in accordance with the procedure recommended in the standard methods water analysis of the American Public Health Association. One copy of these records shall be mailed forthwith by the specialist in science to each of the following: the Rochester Bureau of Health, the superintendent of schools, the superintendent of school buildings and also the principal of the school in which the swimming pool is located.

SECTION VIII—Sanitary Code of the State of New York.

1. All regulations of the sanitary code of the State of New York pertaining to swimming pools are to be made a part of these rules and regulations.

2. A copy of the state sanitary code must be on file in the office of the head of the department of health education in each school having a pool.

3. Articles XIV, XV and XVI of the state code are to be kept posted on the bulletin board in the natatorium.

SECTION IX—Operation and Maintenance of Swimming Pools.

1. Pools shall be opened or closed to bathers only upon direction of the superintendent of schools.

2. Unless specifically instructed in writing by the superintendent of school buildings, the engineer-janitor shall operate the filtration and sterilization equipment continuously

from the opening of school in September to the close of school in June with the following exceptions: (a) each Friday night for cleaning of pool, starting up again immediately after the pool has been cleaned on Saturday, and (b) when and if the pool is to be drained and refilled.

3. On each school day the engineer-janitor shall observe the temperature of the water in the pool before 8:15 a.m. and make such adjustments as may be necessary to bring that temperature not lower than 70° F. and not higher than 74° F. The temperature of the air shall be in accordance with section I.

4. In the morning before the pool is used by bathers, the engineer-janitor shall bring up the water level to the point at which there is a slight overflow into the scum gutter so as to clean the surface of the water. This replacement water must be added through the filters and sterilizer.

5. Natatorium and passages lead ing to natatorium must be kept clean at all times. Scum and débris must be removed by flushing them into the scum gutter.

6. The pool deck is to be cleaned each day between the time of its last use at night and before its first use in the morning. This cleaning must include hosing with hot water.

Week-End Cleaning

7. Over the week-end the pool is to be cleaned in the following manner, the water in the pool not being removed: The sidewalls are to be scrubbed with a scrub brush fastened to a pipe or other long and suitable handle. When the material in suspension from the cleaning has come to rest, the bottom of the pool is to be cleaned with the suction device connected to the circulating pump.

8. Filters are to be backwashed when the pressure differential reaches the point designated for the particular school. They are to receive such additional backwashing as is necessary to keep the pressure differential less than 10 pounds. Backwashing is to be done exclusively by use of the pool water and shall continue until the waste water runs clear (about ten minutes).

9. Immediately following the backwashing, filters are to be rewashed during which process pool water passes through the filter in the normal manner but is wasted to the sewer until such a time as it again shows entirely clear (about three minutes).

10. Chemicals are to be checked for quantity and for proper admittance into the circulating water. One of these chemicals is sal soda. It is placed in the tank in crystalline form and enters the water stream in solution. The amount of sal soda shall be regulated by the *p*H. of the water. If the *p*H. is less than 6.8, the amount should be increased; if the *p*H. is more than 7.6, it should be decreased. Ordinarily about ½ pound of sal soda is required for each pound of alum.

The other chemical is either ammonium alum or aluminum sulfate. This is also placed in a receptacle in crystalline form and is introduced into the water stream in solution. Care shall be taken to keep the amount of alum to a minimum to produce efficient filtration. Alum in the water should not exceed 0.3 parts per million but 0.1 parts is preferred. Approximately 7 pounds of alum are required for coagulation of 100,000 gallons of water passing through the filters.

11. The adjustment of the needle valves shall be made by the engineer-janitor only, who will be directed in that adjustment by the head of the science department at the school in which the pool is located.

Walls of the pool as they appear in the filter room, showing the access side of underwater lights.

12. Frequent inspection of the sterilization equipment is required each day that the pool is in operation. When ultraviolet ray equipment is used, the quartz tubes are to be cleaned with carbon tetrachloride and dilute hydrochloric acid over each week-end. When chlorine-ammonia is used, two to three cylinders of chlorine will be required each year. The equipment is to be inspected for satisfactory operation several times each day.

If the orthotolidin test shows that there is less than 0.7 parts per million residual chlorine, the amount of chlorine added shall be increased; if the test for residual chlorine shows more than 1.0 parts per million, the amount of chlorine to be added shall be decreased. The amount of ammonia added should be approximately one-fourth of the chlorine added. The pool water should contain less than 0.2 parts per million free added ammonia.

Care in Summer

When chlorine only is used, the amount of free chlorine shall be not less than 0.3 parts per million or more than 0.5 parts.

13. The twin strainers on the suction side of the pump are to be cleaned at least once each day.

14. When the pool is shut down for the summer, it is to be drained and all tile work in connection with the plunge, pool deck and wainscot is to be thoroughly cleaned with materials approved for the particular need by the superintendent of school buildings.

The pool is to be cleaned, rinsed and refilled as soon as practicable after it has been drained. During the process of cleaning the pool, all mechanical equipment in connection therewith shall be put in good repair.

Before draining the pool, the filters must be backwashed.

SECTION X.

A copy of these rules and regulations shall be kept on file in the office of the principal, the office of the head of the health education department, the office of the head of the science department, the office of the engineer-janitor and a copy shall be posted in the filter room.

A New Approach

Crataegus crus-galli, the cockspur thorn, is a valuable small tree for use in school plantings. Its horizontal branching habit is interesting in both summer and winter; the profuse flowers of June are followed by red fruits that persist after the leaves have fallen.

to School Planting

NELVA M. WEBER

A LANDSCAPE architect's most important contribution to the ideal school plant is made when the building itself is no more than a blueprint and the future school grounds are an untouched tract of land.

His part in its development is the preparation of a plan that shows the location of the school building in its proper setting with adequate provision for athletic areas, drives and parking space. In no other way can the most efficient and economical use of the land be reached, yet too often the landscape architect is not consulted until the building is finished and someone feels the need for "shrubs."

Every school ground could be a community park with sweeping lawns, shaded walks and interesting groups of shrubs, flowers and vines. There is no reason why it could not serve as a working laboratory for community education in natural history and botany by the use of plant labels and nature trails. The cost need not be prohibitive, for plants in themselves are relatively inexpensive. Part of the planting might be done as a project by the pupils under the supervision of the agriculture or science teacher. Any number of classes might prepare labels to fasten on trees, shrubs and vines.

Budget landscapes can be used successfully on school properties. Perhaps there is already an allotment of money to cover the backbone of the planting scheme for the first year. The second year the foundation planting may be completed; boundary plantings can be reserved for the third year of work. Mothers' clubs, parent-teacher associations or other organizations will often contribute money for planting if they are sure it will be wisely placed. Graduating classes may each give a tree for the school grounds as a parting gift.

The successful completion of such a planting project as this will depend upon a complete and logical scheme for the entire school area, carefully thought through before any planting is done. Without such a guide the finished effect of installment planting will be little short of chaotic.

Plant materials are used in school landscaping for one or more reasons. In connection with architecture, planting supplements the architectural design, strengthens and calls attention to important features, softens lines and adds the interest that living things give to static features. It often serves the purely esthetic or pleasurable purpose of framing a vista or breaking up a large area into interesting small ones. Or perhaps the need is a purely practical one, such as shade, windbreak or screen for the athletic area.

Landscaping on any school property usually begins with the building itself, and well it should since it is the center of interest. Perhaps no other feature of the school plant is so abused in the landscape sense as is the building. Two common errors are prevalent.

First is the matter of scale. Schoolhouses are public buildings, usually of considerable size, quite different from domestic architecture in both scale and general feeling. Plants used in the decoration should show the same difference in scale. Where a barberry or bridal wreath might be used in a residential planting, a specimen of more robust size and character, such as a hawthorn or crab apple, would be more in scale beside a school building. A large public building would not look well with plants suited to small intimate architecture.

The second common fault found in school landscapes is that of overplanting, especially when it results in a complete petticoat of shrubs around the entire foundation of the building, so that it appears to rise

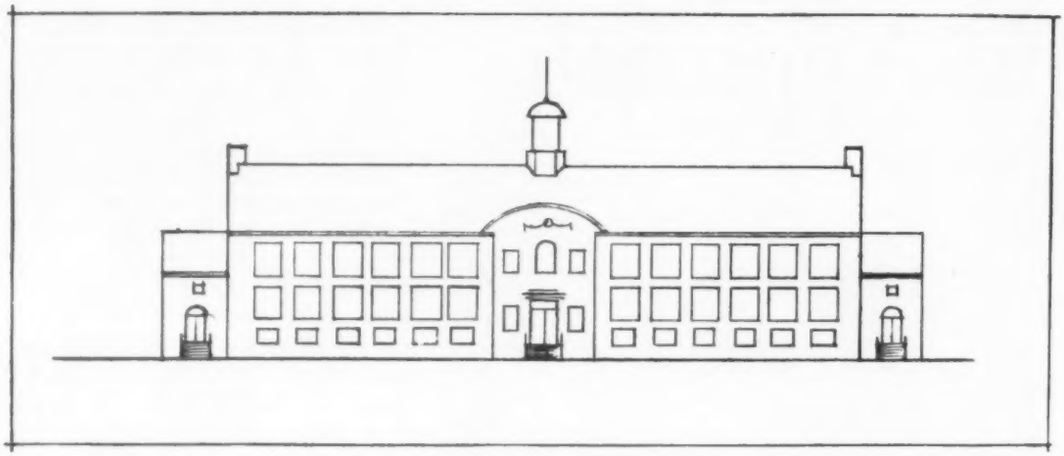


Fig. 1—Line drawing of a typical school building in Colonial, Georgian, French Renaissance or a related architecture.

and fall on a billowy mass of green. If the foundation is occasionally bare of shrubs the building will appear to rest upon solid ground.

There is little reason for using any plant material in connection with a building if it does not strengthen the architectural design.

The most important feature of a building is the front entrance; it should be the center of balance upon which both sides of the finished picture pivot. Therefore, in planting, this main entrance will receive the strongest treatment; secondary entrances will receive a proportionate amount of landscaping. If the building is formal in design, the problem of balancing the planting will be a simple one and usually will consist of repeating the same masses on each side of the center. Buildings with a less formal façade call for informal masses of plants but with the center of balance over the main entrance.

Besides masses of plants at entrances, it is often effective to have groups placed at corners and setbacks. Large uninteresting wall spaces may call for a tree to break up the space with its foliage and to cast shadow. When this is not possible, the same effect can often be accomplished with a vine.

The problems of screening unsightly areaways is a common one in

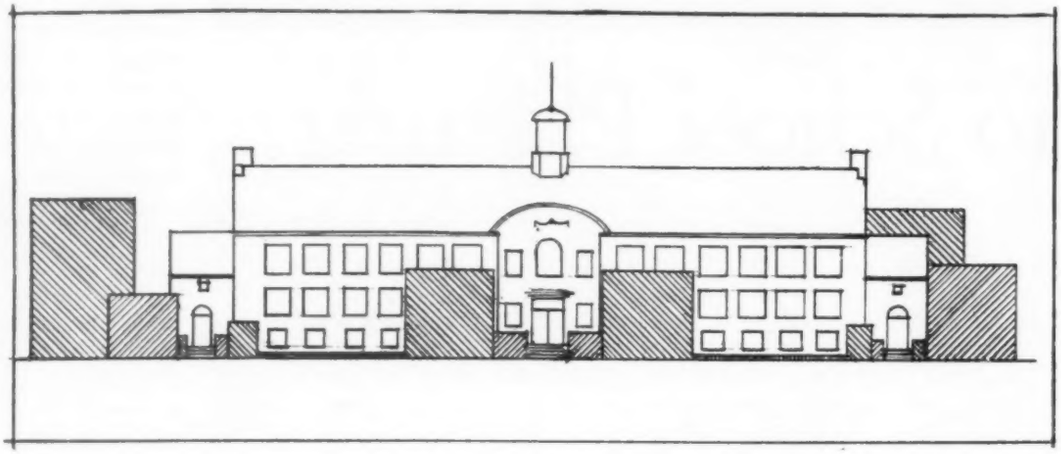


Fig. 2—Block study showing the proposed planting masses in abstract form nicely balanced over the center entrance.

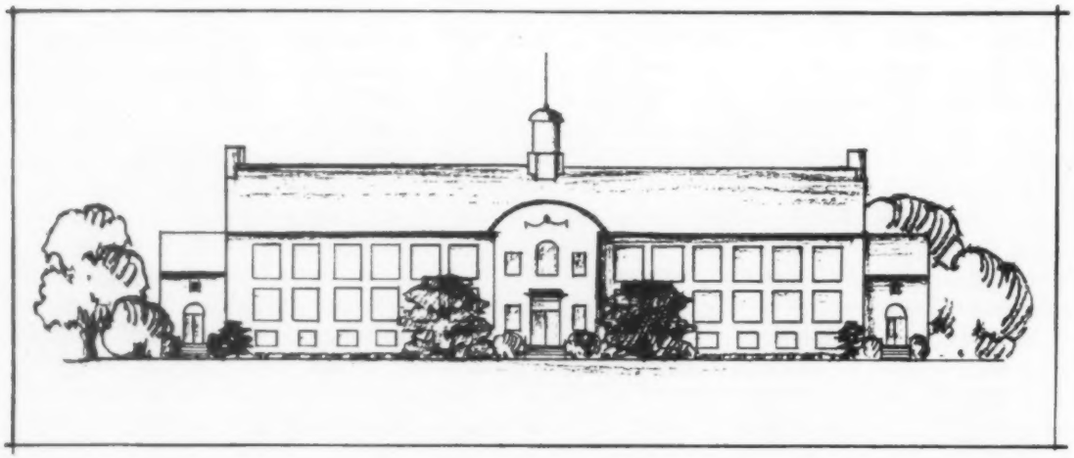
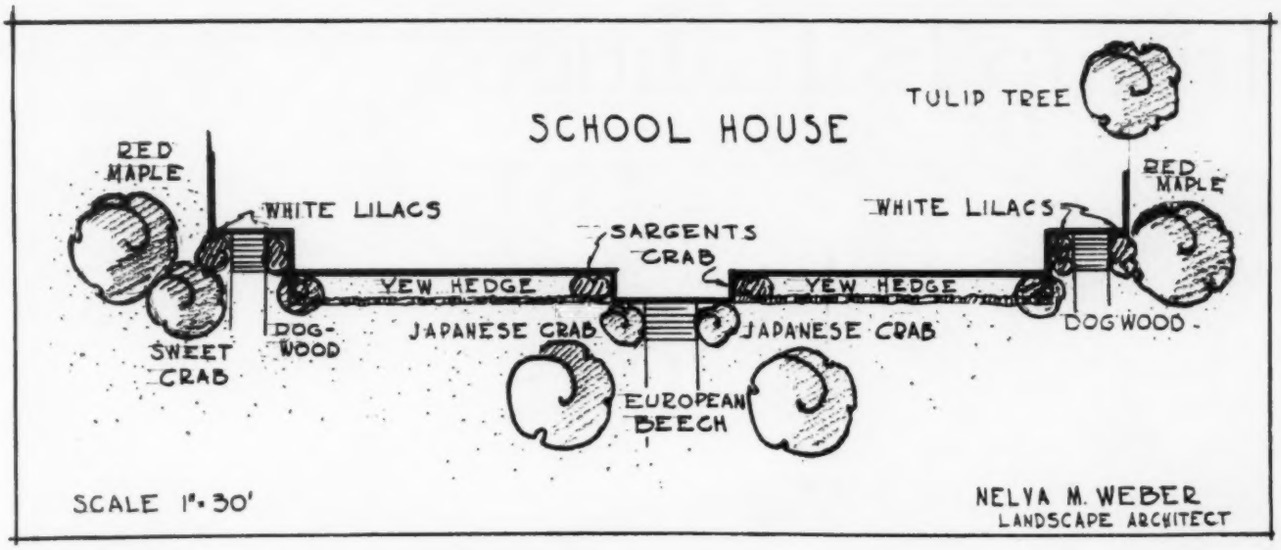


Fig. 3—The blocks of Fig. 2 translated into definite trees and shrubs that have the same form as Fig. 2.



Plan giving the exact locations of the plants used for this school building. A clipped hedge of yew (Taxus cuspidata) gives some screen for areaways and adds an evergreen base line for the rest of the planting. Two Japanese crabs (Malus floribunda) frame the door and mask the steps. On each side and to the back are two Sargent's crabs (Malus sargenti), which are attractive with spring flowers and with autumn fruits; in addition their form is interesting. A large member of the family Malus coronaria is used at the corner of the building. White lilacs frame the side entrance. Beside providing good flowers, the lilacs come into leaf early in the spring. Two large and picturesque dogwood (Cornus florida) stand at the corners of the building. Two European beeches (Fagus sylvatica) are planted far enough from the building so that no light will be shut off, yet from the front they add interest to the façade. The gray bark will be attractive in winter and will repeat the gray winter color of the red maples (Acer rubrum) and horizontal form of dogwood. The design pivots on the center of interest: the entrance.

school architecture. For buildings of more or less formal nature this situation can often be solved satisfactorily by planting a clipped hedge across the entire front of the building and about 10 or 15 feet from the areaway. The clipped hedge seems to shut out the view of undesirable areaways without cutting off the light. At the same time it is crisp and architectural enough in feeling so that it does not produce the unstable billowy effect of a continuous band of free-growing shrubs.

A gravel path with benches at intervals can be placed back of the hedge; taller plants may take their respective places at entrances, corners or wherever else they are needed.

The accompanying series of sketches will give some idea of the procedure that should be followed in solving the problem of any foundation planting. It is a hypothetical example and should in no instance be used literally; just as the same word differs in meaning according to the context, so the same building will be planted differently according to its surroundings. Good native plants in the neighborhood are always a safe guide in landscaping.

A line drawing showing a common type of architecture, which might be French Renaissance, Georgian, Colonial or some related style, is shown in figure 1. The building is formal in treatment with the center of balance over the main entrance.

The first step in landscaping it consists of studying the proposed planting in the abstract form shown in figure 2. The size and shape of the blocks are changed, and the blocks are moved back and forth until there is an equal weight on each side of the center, just as children of different sizes shift themselves on the teeter totter until they balance equally. These blocks are next translated into actual plants, which will produce the size and shape of the block. In choosing plants it is better to err on the side of too few varieties than too many.

Each plant has three design qualities: the color of its foliage, its form or habit and the texture of the leaf and twig. If a group of plants is to produce a harmonious effect, each kind of plant in the group must be harmoniously related to every other kind, either in similar texture, color of foliage or related form.

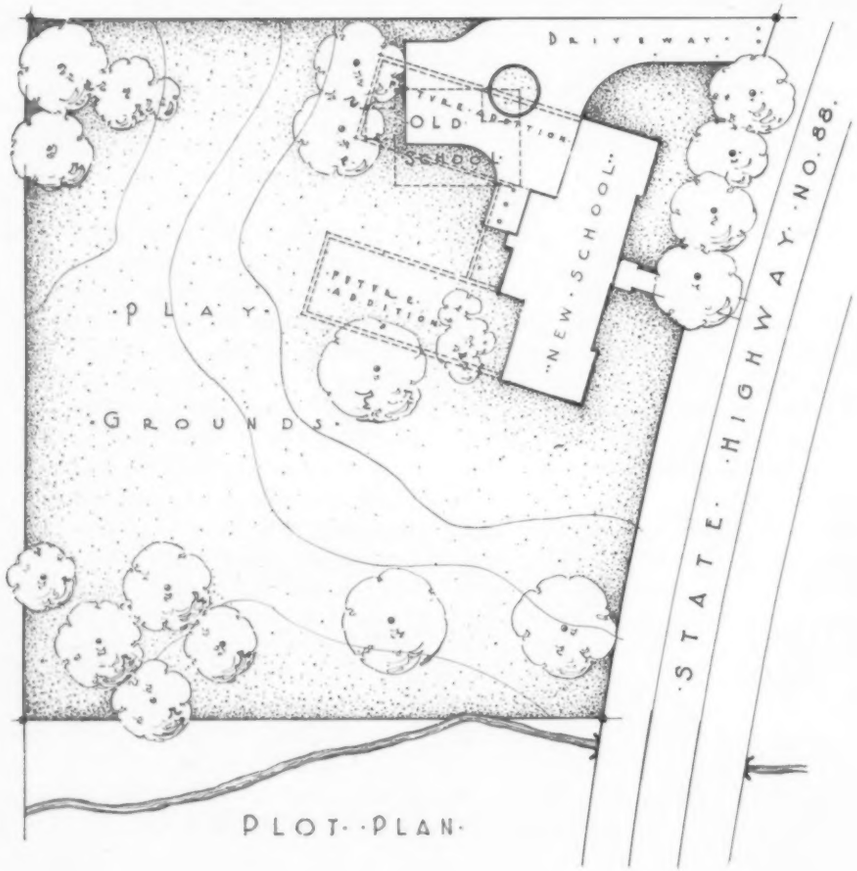
The final step is to translate this elevational sketch into a plan which shows the actual location of the plants. If the same procedure is followed for all four sides of the building, a logical planting plan will be the result.

The layman who plans a foundation planting for a school building will find the result more pleasing if he will keep in mind the matter of scale, choosing large plants for large buildings, using a limited number of varieties, and placing them only where needed in the design, rather than completely around the building. Unfortunately, good taste and a pleasing arrangement of plants come about only with thought and study, and a knowledge of both design and plants is essential.

It is important that the school be well landscaped, for it should lead the community in good taste. It is every child's birthright that he should have the opportunity of growing up with beautiful plants correctly arranged.

True to Its Tradition

J. C. NIEMEYER



SCHOOL DISTRICT No. 5 in Mendota Township, Dakota County, Minnesota, is located on State Highway No. 88 about 2 miles south of St. Paul and within a few miles of historic Fort Snelling.

Through increased population the old two story frame school was outgrown and the present building was necessitated. Georgian Colonial was selected for the design because of the historic heritage of the district, yet it was used at no sacrifice to the adoption of modern interiors and the latest teaching equipment. Perishable materials were avoided and installations were chosen for minimum maintenance and permanent security. Sanitation and service drudgery also were considered equally important.

Continued use of the old school during construction required certain economies and liberties; certain compromises were mandatory. Ground slopes, roadway entrances and level areas placed the building in closer perspective than was wanted; this, however, allows for close landscap-

·MEZZANINE·
·FLOOR· ·PLAN·

ing and thus leaves a larger area for recreation.

Immediate requirements called for a three room elementary grade school, but it was decided to add the fourth room to balance the appearance of the front façade.

Classrooms are all on one floor, and the toilets, teachers' office and library are arranged in mezzanine location, equally accessible from the principal levels. Teachers' room and library are placed in the quiet zone yet are not inaccessible.

The arrangement of stairways is such as to minimize the width of the principal corridors with a decided saving in the cost of construction. Physical education activities combined with parent-teacher and community usage and with plans for future growth prompted the arrangement of the basement.

Recreation rooms were divided for janitor and adult privileges. Shower and dressing rooms complete the allocations for both present and future gymnasiums and for auditorium recreation. The kitchen and pantry are planned for social uses at present and later are to be converted into domestic science quarters. The remaining part of the recreational area is for future manual training. Boiler room, pump room and fuel room were placed on a separated lower level and away from general activities of the building.

Future additions are noted on the plot plans and will accommodate added classrooms, toilet facilities, gymnasium, auditorium and library. The present library will be used for teachers when additions are made. No change will be necessary in the present appearance other than consistently to carry on the roof lines and elevations, all of which will be in harmonious progression.

Metal was used for base, chair rails, picture moldings, stools, dado strips, blackboard trim, corner beads and lockers throughout the building. Terrazzo floors, except in the main corridor and in the classrooms, complete the achievement in low cost, sanitary maintenance.

Because of the historic heritage of the district in which this school in Mendota Township, Dakota County, Minnesota, is located, Georgian Colonial was selected by J. C. Niemeyer, architect. The school and plot plan appear on the opposite page and basement and first floor plans, above.

Arrangement of stairways minimizes width of the principal corridors to effect a decided saving in construction cost.

Vitalized colors, chosen by an expert in color for their psychological effect upon children, distinguish the junior and senior high schools in Santa Monica, Calif. A moving pattern of color progresses around the building, changing from warm to cool, the warm and cool colors converging at the point of greatest interest.

Color Without

LAURA CRAWFORD

IN SANTA MONICA, Calif., a complete program of school reconstruction and modernization is now drawing to a close. The new type of activity school building developed to meet the needs of Santa Monica's educational program is an example of the latest development in architectural skill and has made a distinct contribution in the field of school planning for progressive education. In line with the changing concepts of education, traditional classrooms have articulated themselves into interesting and efficient laboratories and workshops in which modern youth may learn by doing.

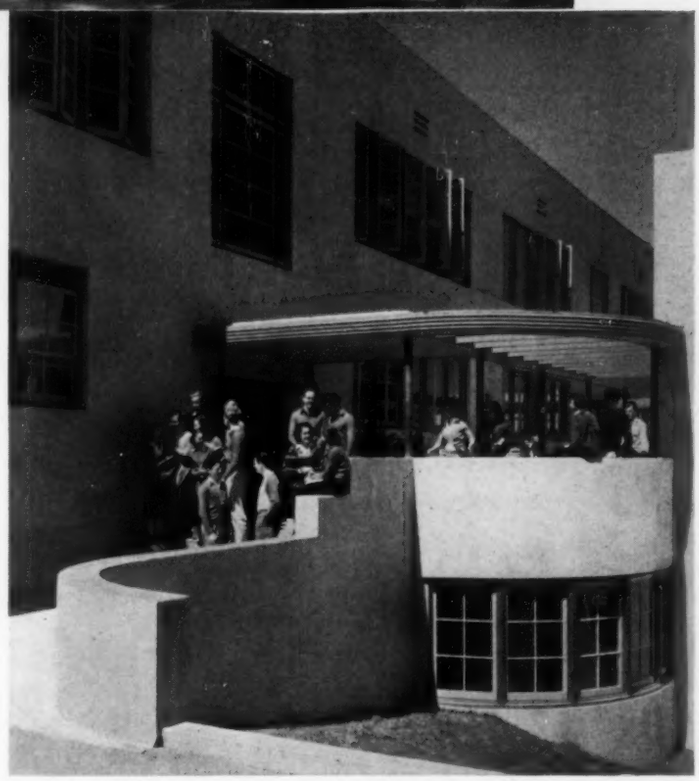
The lines of all buildings follow the modern trend and beauty has been achieved by simplicity and the studied use of color. The cheerful colors used in ornamentation of both exterior and interior of the new schools are not merely a happy accident or a pleasing combination chosen as an interior decorator might choose a color scheme for a dwelling or public building but the colors were chosen by a color expert for their effect upon the children who work and play in the schools.

The elementary school buildings are excellent examples of the advantages of one story construction providing safety from fire and earthquake hazard. Outstanding among the new features with which each primary classroom is equipped are the reading alcove, the workroom and the outside terrace.

The problem was to develop a color scheme to augment the use of the new activity type of classrooms. It was not desirable to use any of the primary colors, since even the kindergarten children are beyond the stage at which primary colors make the strongest appeal. If the colors used appear brilliant, it is only because of their relation to one another. Placed beside pure colors, they would appear dull. All of the colors in each building are closely related, as they have in common at least one neutralizing pigment. In each case the desire was to provide a color arrangement that would be pleasing and stimulating to the children rather than to passer-by or casual visitor in the school.

The design of the new type of junior high school was inspired by a sympathy and understanding of the adolescent and his world. This building also is an example of one story construction and is of an open rambling type, 420 by 206 feet, built around two patios.

The lines of the building follow the modern trend, expressing simple beauty through line and color. One of the factors in determining the color scheme was a structural one. Because of the extreme length of this building of frame and stucco construction, it seemed desirable to



and Within

The buildings are fine examples of advanced structural design, suited to new teaching concepts.

create mechanical joints in the wall surface to provide logical points of expansion and contraction in the stucco surfaces. These joints were so arranged with varying color that a moving pattern progressed around the building developing a rhythm emphasizing or subduing the various parts. The color of the walls is allowed to progress through a range from warm to cool, balancing the warm and cool sides of the various parts of the building. There is no place in which there is a break in the color progression except at the point of greatest interest: the entrance. There the coolest and warmest colors are brought together for contrast. The color range is, however, actually only two colors with blended shades between.

The exterior color scheme is as follows: exterior trim, dull red violet brown; sash, pale blue green; doors, deep dull blue; pipe columns, dull red orange; fasciae and parapet caps, medium green blue. All of these colors are definitely related to one another and to the stucco color range.

The color scheme of the school has naturally created a great deal of interest and visitors have come from long distances to view and study the building. The reaction of pupils and visitors alike to this new use of color has been very good, indeed. Educators pronounce it practical as well as beautiful.

In the modernization of the high school the problem was to replace Romanesque design, which was much liked, with a rehabilitation which of necessity must be simple yet still have a degree of sophistication not present in the elementary or junior high school. Extreme economy of program, as in all the schools, was also a prime factor in the design; therefore, reliance on color was again essential to complete a harmonious group of buildings.

Simple masses interrelated on a beautiful landscaped and wooded slope suggested a soft green for the dominant wall color for the group. This would tend to combine with the foliage and where many units occur together would avoid monotony.

Intensification of the component parts of green forms the deep blue trim and soft golden yellow of the windows. The doors show warm accents of deep cocoa brown with horizontal bands of heather violet on hoods and shelter fasciae. Relating the site and the building units to the logical expanding growth of student activity was the fascinating problem involved. The architects believe that student reaction and enjoyment of the building tend to show that a forward step in school planning has been achieved. Instead of depressing and retarding the development of youth as dull drab and monotone color schemes seem to do, vitalized color brings a feeling of life and youth into the schools whether elementary or high school.

The type of school architecture developed in Santa Monica does not claim to be the final solution in school planning, but it has set a high standard and has made a distinct contribution in the field of school planning for progressive education. Teachers, administrators and architects spent long hours in creating these buildings to meet the needs, interests and abilities of children.

The House That Pupils Built

A NEW five room residence situated on a shady street in Champaign, Ill., may well be considered a monument to practical education.

The house was designed and built by pupils in the vocational training classes of the senior high school of Champaign. Cooperating to make the school project possible were the board of education; organized building craftsmen; building construction contractors; the city council and municipal employes, and the building material dealers.

The idea of having high school pupils erect a house as a part of their vocational training did not originate locally, according to E. J. Simon, director of vocational education for the city schools. It has been tried elsewhere, he said, but the Champaign project is the first undertaking in which all local groups which might be interested in or affected by the work sponsored the project.

The house was built on credit. The owner of the lot and the building material firms agreed to wait for their money until the structure was sold. They waived interest on the indebtedness. The board of education advanced money with which to pay the necessary outside labor — all at the prevailing wage — with the understanding that the taxpayers were to be reimbursed from the proceeds of the sale. The lot cost $700, the materials, about $3500. Sealed bids are being received on the house and lot. Mr. Simon believes that some will run as high as $5500. The profit will be used as a building fund with which to start next year's house.

The design of the exterior follows that of the prizewinner in a small home contest conducted by an architectural magazine. Some changes were made in the interior design by the architectural drawing class. Eighteen working drawings were prepared by the pupils.

A good type of frame construction was decided upon. The home is insulated. Heat is supplied by a coal burning hot air furnace, which has an electric fan to force circulation and which is equipped to add moisture during the winter months. The foundation is concrete and the roof is of asphalt shingles.

Work was started in November 1937. Pupils were not called upon to do work that was not usefully instructive. The basement was dug with purchased labor.

The pupils worked at the house only three hours in the afternoons. Most of the actual work was done by the carpentry class, although electrical classes and sheet metal work classes also contributed. Working from the school drawn blueprints, the shop classes manufactured all of the millwork, except window sash and three interior doors. The sheet metal school apprentices made and installed the gutters, downspouts and ventilating ducts.

Plumbing could not be installed without a city permit. The plumbing contractors met this obstacle by designating one of their members to take out the permit and to assume general direction.

Except for the plumbing, finish plastering and some aid on particularly difficult parts of the work, the completed house stands as the work of the vocational training classes.

Long before the home was completed, the home economics pupils were planning how to furnish the home. Even the high school art classes were involved. To them fell the decoration of walls in the basement "rumpus room" and painting oil murals above the tile wainscoting in the bathroom of the new house.

Music While They Eat

Miniature Views of English High School Cafeteria, Boston, One of Nation's Finest School Lunchrooms

WHAT is regarded by many as the finest school cafeteria in the country is to be found in the English High School, Boston. Opened first in December 1936, the total cost was $125,000, the city paying 55 per cent and the federal government, 45 per cent. Facilities are provided for seating 1100 children at one time. In an adjacent room are accommodations for 120 members of the faculty.

One of the unique features of this cafeteria is that it is built in a courtyard, its walls being the walls of the school building. It is one story, with a roof of special prism glass. Another item of real interest is the service counter. There is not one long rail, but divided rails perpendicular to the counter, which permit simultaneous service for many different groups. Noise is reduced to a minimum by acoustic tiling.

Some construction details are of interest. About 1000 tons of cement were used in the structure. The entire building is built on harbor mud, since it is reclaimed harbor area. This necessitated 35 columns, which have their foundations 20 feet below the surface. The floor comprises 10 inches of cement covered by 4 inches of terrazzo. Fourteen exits and entrances are provided.

Throughout the lunch periods music is broadcast from the school's amplifying apparatus. This is also connected with the radio, which makes it possible to bring in anything of national importance. Selected records are also broadcast during the luncheon periods.

Aims of the Lunchroom

MARY HEMMERSBAUGH

TODAY more than ever before there is general appreciation of the importance of good nutrition and greater realization of the need of applying the facts of good nutrition to school feeding.

The school cafeteria may render the following types of service to school and to community: (1) an agency for feeding children from indigent families; (2) a special center for feeding underprivileged children, the tuberculous, the crippled, the blind and the deaf; (3) a convenient food service to teachers and pupils at noon and for special occasions, and (4) a place for training children in good food habits and in the selection of proper food.

All these services must be operated for the benefit of the pupils. The fundamental purposes around which the whole organization is built are simple: (1) to give the best food possible and the greatest quantity possible; (2) to aid pupils to practice good health habits daily, and (3) to give long range training to pupils in the selection of food.

The lunchroom manager has an opportunity to help boys and girls in learning good food selection. She can reach all the pupils in a school and, indirectly, the entire community.

Although these boys and girls may select good lunches, this factor is not as important as getting them to make the right choices and as developing the right lifelong attitudes regarding food. Aside from the practical necessary daily food service, the cafeteria's really greatest service is in teaching good food habits. There are three effective ways to accomplish this: through good food, right prices and good psychology.

Successful finances are a necessary background. By Ohio law school cafeterias are nonprofit enterprises. Certainly this is right. The need for good food at low cost is great. There are too many cases of malnutrition among school children both in well-to-do and poor families. The challenge of having to be self-supporting may actually further cafeteria management. Careful finances and efficient management effect better values for the money. The child benefits because of the necessity for good organization.

Sanitation is of paramount importance.

A school or system should build up a file of tested recipes and use them faithfully. Tested recipes are necessary from the standpoints of cost control and uniformity of product. Good cooking or method is as important as the ingredients are.

One of the best ways of getting pupils to eat the foods they should is to offer them at bargain prices. For this reason, certain foods, such as resale foods, may be sold relatively high while milk, fresh fruits and vegetables are priced lower.

As supervisor of Cleveland public school lunchrooms, the author is well qualified to cite the fundamental needs for which the cafeterias are operated

All over the country tray specials are being offered at bargain prices. The reason is that the pupils eat the proper foods in palatable combinations and are aided in developing good habits of nutrition. This is one of the best ways to get pupils to acquire good food habits.

The wise manager is far-sighted enough to see that the sale of tray specials should be stimulated; that they are one of the best means by which the cafeteria may function in the health program of the school. She will not use leftovers nor will she "cheat" in any way. She will realize that they are valuable to her purpose from the standpoints of nutrition, purchasing, real variety, elimination of leftovers, efficient operation and increased patronage.

Counter display may be made the means of popularizing tray specials and desirable protective foods. Other devices are the school radio, newspaper and homeroom bulletin. Integration with other departments is valuable. The lunchroom may be made the vehicle by which the teachings of other departments are put into practical use.

The purpose is furthered when faculty members realize the importance of the lunchroom in the education of their pupils.

At this point the importance of lunchroom employes should be emphasized. Their graciousness promotes good lunch selection. The women in the kitchens should be as interested and loyal as they would be in their own kitchens or own businesses.

All employes should understand the underlying purpose of furthering good food selection. The entire personnel should have the proper attitude toward the children, the teachers, the job to be done, the manager and one another.

Fairness and loyalty to them in wages, working conditions and supervision will beget fairness and loyalty in return.

The manager should take the initiative in making the cafeteria fulfill its fundamental purposes. The food must be attractive and must taste good. Her personality means much. An enthusiastic kind courteous manager influences children's confidence in the cafeteria. She must be firm in her professional ethics and honesty of purpose. Easy popularity can come in many ways that should be shunned. It is her job to look out for the welfare of the pupils.

She can encourage better lunch selection, but alone she can by no means do all that should be done. She needs the backing and cooperation of the superintendent, principal, faculty, custodian, parents and venders. Many people go to make up a successful venture.*

*From an address given before the North Eastern Ohio Teachers' Association.

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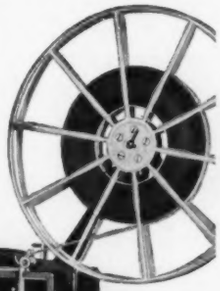

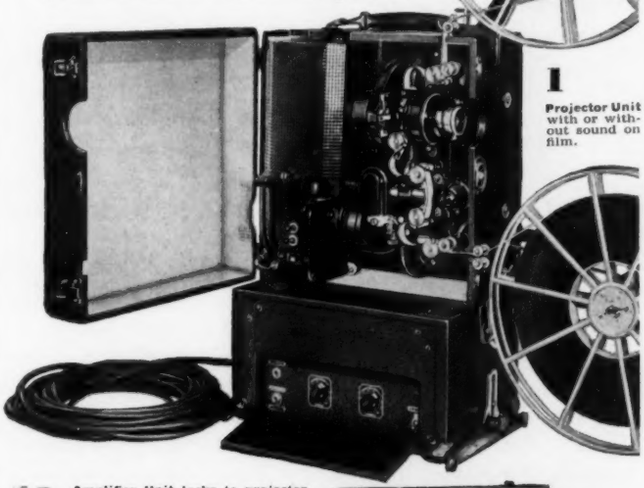

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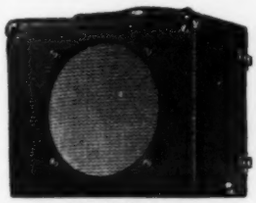

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Students Solve Cafeteria Problems

MARGUERITE TICE

PERHAPS no trend in modern education has been so beneficial and wholly satisfactory to both pupil and teacher as the trend toward pupil participation in all school problems. Within the past few years, the student council form of government has been adopted in many schools. It is a central governing body composed of pupils meeting at set intervals to discuss and offer solutions to current school problems. The burden no longer falls heavily upon the shoulders of the teaching staff. Instead, the entire pupil group shares the responsibility and the result is a spirit of cooperation and understanding.

Rufus King High School, Milwaukee, has gone even one step further. Rather than one student council to govern all affairs it has inaugurated a system of twelve councils, each overseeing one particular branch of school activity. Among these governing groups are the following: library, cadet, social, school, bicycle, newspaper, auditorium, publicity and cafeteria. Each homeroom elects one member to represent it at, each of the individual council meetings held twice a month.

The cafeteria council concentrates its efforts on the formulation and regulation of the dietetic and social problems involved in successful cafeteria management. Each of the 54 homerooms sends one representative to meet with two faculty advisers at the semimonthly meetings. The opinions and desires of the homeroom groups are presented by the representatives during these monthly meetings and impartial discussions follow. Before any final decision is made, the representative presents the problem to his homeroom group and at the following meeting votes according to its decision. Thus, the ideas and desires of the pupils are incorporated into the policies of the cafeteria.

For instance, one of the problems solved by the council was that of making available lunches of the maximum nutritive value at a minimum cost. The adoption of a 10 cent plate lunch as a regular part of the cafeteria menu resulted. It has been highly successful, not only in popularizing the cafeteria but in developing the right food habits. Another problem faced was that of competing with corner drug stores and street vendors in the sale of ice cream and sundaes. The council suggested inclusion of sundaes and malted milks in the regular menus and the experiment has proved successful in keeping pupils in the school building during lunch hours.

Then there was the problem of pupil conduct in the cafeteria. Again the council formulated plans for the regulation of such things as the disposal of refuse and care of trays and milk bottles. Through that body also, the homerooms were made conscious of personal conduct. Rowdyism, marring of chairs and tables, defacing of walls and similar misconduct have become taboo by the unanimous consent of the pupils.

Closely related to the question of conduct in the cafeteria was that of providing some sort of recreational facilities during the lunch hours. The cafeteria council felt that by offering varied forms of entertainment within the lunchroom, loitering in halls and general restlessness could be minimized. There have been placed at the disposal of the students ping-pong tables, checker boards, chess boards and other varied games which they may check out and return at the close of the lunch hour. A piano also was acquired and a small space reserved for dancing. Again the activity of the council has proved valuable, for the pupils now wholeheartedly participate in and appreciate the recreational opportunities offered.

The council system, in general, and the cafeteria council, specifically, have been most successful. It is encouraging to see the willing ability of pupils to handle their own school problems when given the opportunity. Though the idea is still in infancy, it has accomplished much, and the future appears to hold unlimited possibilities.

FOOD FOR THOUGHT

All for 3 Cents a Day

• The consolidated school at Port in Washita County, Oklahoma, serves hot lunches daily to more than 400 pupils at a charge of 3 cents a day. Those who are unable to pay eat free. Teachers pay $2 each month.

Food is prepared by three full-time helpers, two women and a boy, who also is a truck driver. The women helpers ride to school on the bus. In a small room with five two-burner hot plates they prepare one of the following meals:

Monday: Soup and apples.
Tuesday: Soup.
Wednesday: White beans and oranges.
Thursday: Soup.
Friday: Soup and bananas.

The boy assists the two women cooks by bringing in all water and materials and by doing heavy work.

At five minutes before twelve each teacher sees that the pupils clear their desks, that paper napkins (or sheets of clean newspapers) and bowls and spoons are distributed.

N.Y.A. pupils do all transporting of food. Each helper comes in with soup in a nonspillable cream can and, as he holds the container, the teacher serves each pupil. Pupils pass out crackers and fruit.

Pupils may have all the soup and crackers they want, but are permitted one piece of fruit only. The dishes are gathered up in a large container and taken back to the kitchen, where they are washed and returned to the room.

Part of the food is furnished by the state welfare board and part is purchased by the school with money paid by pupils and teachers. Local community clubs have donated both work and money toward the program.

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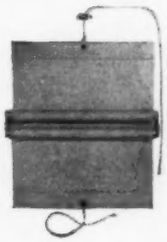

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BETTER PLANT PRACTICES

Mixing Paint

John Wright, a supervising painter in the department of building and grounds, Detroit board of education, recommends the following paint mixtures for walls and woodwork, according to Mabel Arbuckle, supervisor of art education. Each color is made with a white paint base; the more of the white base used the lighter the color.

In mixing paints, add very little color at a time, try on the wall and let dry before adding more of the color. A large area of color seems much more intense than a small area. Caution: a "touch" means just that!

Cream buff is used largely in public buildings because it reflects light. Some other colors, such as green and red, absorb light. But, after all, if a room has sufficient window and artificial lighting provided, a light wall tone in any color would not absorb sufficient light to be detrimental to vision. For a bright finish mix paints with linseed oil and dryers; the addition of a little varnish increases the glossy finish.

For a flat finish mix paints with turpentine only. Flat finish gives a much better effect and is not difficult to keep clean.

LIGHT WARM GRAY
White base
Black
Yellow ochre
Burnt sienna, touch

LIGHT WARM GREEN
White base
Chrome green, medium
Chrome yellow, medium
Raw umber, touch

LIGHT GRAYED RED
White base
Brick red, oxide
Raw sienna
Raw umber
Lemon chrome, touch

LIGHT BLUE GREEN
White base
Prussian blue, touch
Chrome green, medium
Chrome yellow, touch

FOR BRIGHT FINISH
Mix paints with linseed oil and dryers; addition of a little varnish increases the glossy finish.

FOR FLAT FINISH
Mix paints with turpentine only.

LIGHT BLUE
White base
Cobalt blue
Chrome yellow, touch

CREAM BUFF
White base
Raw sienna
Chrome yellow, touch
Burnt umber, touch

When It's Time to Dust

Some one inquires about the best tools for dusting walls and ceilings. One large school system reports that the best equipment for accomplishing this has been found to be: (1) a special wall brush or a special sanitary duster resembling a floor brush in shape and having an extension handle and (2) a very soft floor brush containing only bristle and horse hair. Either of these tools will remove loose dust from walls with a minimum of streaking. Sometimes a new "standard" floor brush with a soft, clean cloth wrapped around the head and fitted with an extension handle is used.

The side walls of a room should be dusted from the top down, lapping the brush strokes in order to get complete coverage. Ceilings should be dusted first crosswise and then lengthwise of the room. When this method of dusting will not produce acceptable results on properly painted walls, it means that the walls should be repainted.

More About Fire

Try hard as we will, it is difficult to keep from harking back to that all-important subject of fire hazards. This time it's Arthur A. Knoll, business manager, Long Beach City Schools, Long Beach, Calif., whom we are quoting.

"Fire and panic prevention have probably received a more careful consideration in legislation than any other building requisite. In buildings of more than two stories all structural parts should be of noncombustible materials. In two-story buildings corridors and stairs should in all cases be constructed of noncombustible materials throughout. They should form one continuous unit so that children may be emptied from classrooms with wood floors into these corridors as a means of exit.

"There should be two doors from each classroom so that the closing of one from any cause will not trap the children within the room. All arrangements of exits should comply with the existing regulations of the community as to width, hand-rails, hang of doors and other essentials, or, if there are no such local regulations, then with the regulations of the nearest authority. Panic bolts should be provided at all exit doors. All classroom doors should be provided with thumb turns operative to unlock but not to lock the door from the inside.

"Proper fire stopping should be provided in the walls of wood-frame and steel-frame buildings to eliminate the fluelike action of these otherwise open spaces. There should be no open stairwells extending to the roof or to skylights in such a manner as to furnish a draft flue for fire. Roof spaces should be separated into areas not exceeding 1500 square feet by the insertion of redwood fire partitions. Fire separator walls of noncombustible materials should be used to break up the buildings into areas complying with current fire regulations for the particular type of construction. Closets with wood studs should be plastered to provide at least one-hour fire resistance. Proper standpipes with adequate water supply and niches for fire extinguishers should be provided.

"Improper electrical installations are a source of countless fires. All installations should be made to comply with the latest rules of the fire underwriters. Open wiring should be replaced with conduit wiring. Open knife switches should be removed and protected switches used. Wire and cable loads should be checked and, if found inadequate, supplemented with additional copper.

"Boiler rooms in most old buildings are fire hazards. All walls should be of not less than four-hour fire resistant construction and all openings should be provided with metal-covered doors with louvers. No wood steps, ladders or bins should be permitted. All should be of steel or other incombustible materials."

Unsightly Stains

Nothing is so unsightly as urine stains on the marble in lavatories; unnecessary, too, if we follow the method described by D. W. Kessler, research associate, National Bureau of Standards.

"Dissolve 2 pounds of trisodium phosphate crystals [or a similar commercial preparation] in a gallon of hot water," he says. "Mix the contents of a 12-ounce can of chlorinated lime to a paste in a shallow enameled pan by adding water slowly and mashing the lumps. Pour this, and the solution, into a stoneware jar and add water until approximately 2 gallons are obtained. Stir well, cover the jar and allow the lime to settle. Add some of the liquid to powdered talc until a thick paste is obtained, and apply as a poultice, ¼ inch thick, with a trowel. If it is desired to apply this with a brush, add about one teaspoonful of sugar to each pound of powdered talc. When dry, scrape the poultice off with a wooden paddle.

"This mixture is a strong bleaching agent and is corrosive to metals. Hence, in using it care should be taken not to drop it on colored fabrics or metal fixtures. Some parts of the stain may prove stubborn, in which case saturate a layer of cotton batting in the liquid and paste over that part of the marble. Resaturate the cotton if necessary."

NEWS IN REVIEW

Construction in Arrears

Although the general situation in the nation in regard to school buildings is well known among educators, last year the National Advisory Council on School Building Problems asked for a more comprehensive picture. In response to this request, the U. S. Office of Education sent out a questionnaire to state superintendents of public instruction and to superintendents in cities of 10,000 population and over.

The deplorable condition into which schoolhouse construction had fallen during the World War had scarcely begun to be restored before the depression came along and again capital outlay for schools suffered drastic cuts. Although approximately $156,000,000 has been made available each year since December 1933 for school building construction, P.W.A. grants and loans for school buildings have not begun to restore appropriations for school buildings to the predepression level.

Alice Barrows, senior specialist in school building problems, in writing the report of the survey, makes some conclusions of social import:

1. There are 132,000 one room schools in the United States. Reorganization of many small schools into large administrative units is desirable.

2. If the children of today in elementary and high schools are to be equipped to meet the conditions of modern life and deal with them intelligently, it is necessary for the school to provide the facilities needed for a modern curriculum. The average school building of 30 years ago did not have these facilities. Yet the present study revealed that more than 39 per cent of the school buildings in 506 cities of 10,000 population and more are more than 30 years old.

3. The school must now provide not only for children in elementary and high schools but also for the thousands of boys and girls from 18 to 21 years of age who are neither in colleges or universities nor at work. . . . The curriculum will have to be changed to meet the needs of these young people. This means that school buildings will have to be altered and equipped to meet these needs.

4. Schools also must provide opportunities for adults for reeducation in new lines of work made necessary by industrial changes. . . . The modern well-planned high school is adapted for use by adults but more buildings of this type are needed.

5. School plant surveys are essential for adequate school plant programs. The lack of data available as to school building requirements for places under 10,000 population indicates that state departments of education are justified in their conviction of the need of school building divisions with adequate staffs and funds for making comprehensive and continuing surveys of school building needs. Such need cannot be determined except on the basis of comprehensive long-range surveys which take into consideration population trends, economic and social trends and the educational program needed for the children, youth and adults of a given community.

MEETINGS

Convention Date Changed

The 1938 meeting of the National Council on Schoolhouse Construction will be held in Frankfort, Ky., on November 14 to 17, instead of October 19 to 22, as previously announced.

N. A. P. S. B. O. Plans Program

"Modern Trends in School Business Management" has been adopted as the general theme for the week's program of the twenty-seventh annual convention of the National Association of Public School Business Officials in Chicago, October 10 to 14.

Monday, October 10, will be organization day. While the various committees of the association are meeting, noncommittee members will have time for visiting the Chicago schools. The huge exhibit hall on the fourth floor of the Palmer House, where the session will be held, will open officially on Monday evening.

The topic "Trends—How Should We View Them?" has been selected for the first general session on Tuesday morning. The Tuesday afternoon program will be devoted to four sectional meetings on supplies and equipment, building construction, school accounting practice and insurance.

The night programs on both Tuesday and Wednesday evenings will be round table discussions. "Trends—How Do They Affect School Building Problems?" is the subject of the Wednesday morning program. Three papers will be given on the Wednesday afternoon program.

The Thursday morning program will again follow the subject of trends and

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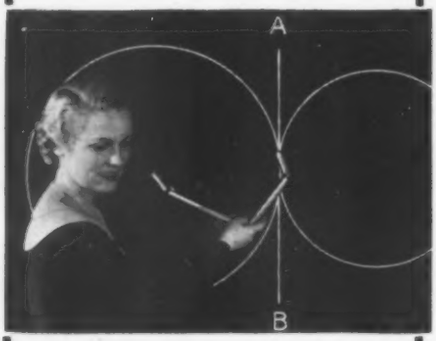

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their effect on school and community relations. Four sectional meetings on Thursday afternoon will include custodial service, transportation, cafeterias and finance.

The meeting will close Friday noon.

Some headliners who will appear on the program are: Lewis E. Parmenter, distributor of school supplies and equipment, Buffalo, N. Y.; Dr. Arthur B. Moehlman, editor of The NATION'S SCHOOLS; Don C. Rogers, director of the bureau of research and building survey, Chicago board of education; Hans W. Schmidt, supervisor of school building service, Wisconsin State Department of Public Instruction; Dr. T. C. Holy, Ohio State University; Dr. George D. Strayer, Teachers College, Columbia University; Raymond V. Long, director of school buildings, Virginia Department of Education; Dr. E. S. Lawler of Northwestern University.

Prof. Newton Edwards of the University of Chicago; Prof. Ned H. Dearborn, director of the institute of education, New York University; Dr. Paul J. Misner, superintendent of schools, Glencoe, Ill.; Dr. John Guy Fowlkes, professor of education at the University of Wisconsin; G. Robert Koopman, Michigan State Department of Education; Evelyn Smith, assistant professor of institution management, University of Illinois; Mrs. Ethel Martin, director of nutrition service, National Dairy Council.

Other speakers who are announced are: William T. Simons, Niagara Falls, N. Y.; O. F. Hassemer, St. Louis; Alfred C. Lamb, Detroit; W. M. Councell, East Cleveland, Ohio; C. F. Budd, Denver; L. A. Wiles, Detroit; William M. Susanka, St. Louis; J. C. Ludlam, Lincoln, Neb.; Ira G. Flocken, Pittsburgh; L. D. Shuter, Columbus, Ohio; S. C. Joyner, Los Angeles; W. N. Decker, Altoona, Pa.; George W. Grill, Lakewood, Ohio; James J. Ball, Denver; Francis C. Buros, White Plains, N. Y.; Wilbur J. Wolf, Omaha, Neb.; Philip J. Hickey, St. Louis, and Helen K. Thompson, Greenville, Pa.

Literature Congress

The first International Congress of the Teaching of Ibero-American Literature will bring together teachers and writers from American institutions in Mexico City, August 15 to 22. Establishment of exchange professorships and libraries of Ibero-Americana will be discussed. Special emphasis will be placed upon the wider inclusion of Brazilian literature.

Engineers, Custodians Convene

Classes and business meetings of the National Association of Engineers and Custodians held during the week of June 20 in St. Louis were conducted along much the same lines as last year. The short course, held in Beaumont High School, required twenty-four clock hours. A total of 365 persons registered, including 201 from St. Louis, and thirteen states were represented by the other 164 members. An effort will be made in October to interest and obtain the cooperation of the

Coming Meetings

Oct. 10-14—National Association of Public School Business Officials.

Oct. 13-15—Vermont Education Association, Burlington.

Oct. 13-15—Utah Education Association, Salt Lake City.

Oct. 19-21—New Hampshire State Teachers' Association, Concord.

Oct. 20-22—Wyoming Education Association, Rawlins.

Oct. 26-28—West Virginia State Education Association, Charleston.

Oct. 26-28—North Dakota Education Association, Fargo.

Oct. 27-28—Indiana State Teachers' Association, Indianapolis.

Oct. 27-28—Maine Teachers' Association, Bangor.

Oct. 27-29—Minnesota Education Association, Minneapolis.

Oct. 27-29—Rhode Island Institute of Instruction, Providence.

Oct. 27-29—Montana Education Association, district conventions, Kalispell, Billings, Great Falls and Bozeman.

Oct. 27-29—Colorado Education Association, district conventions, Denver, Pueblo and Grand Junction.

Oct. 28—Connecticut State Teachers' Association, New Haven, Hartford and Bridgeport.

Oct. 28-29—Maryland State Teachers' Association.

Nov. 3-5—Iowa State Teachers' Association, Des Moines.

Nov. 3-4—Arkansas Education Association, Hot Springs or Little Rock.

Nov. 4-5—Conference of Food Service Directors, Rochester, N. Y.

Nov. 4-5—Kansas State Teachers' Association, Kansas City, Topeka, Salina, Hays, Garden City, Hutchinson, Wichita and Pittsburg.

Nov. 6-12—American Education Week.

Nov. 10-11—Delaware State Education Association, Newark.

Nov. 10-12—New Jersey State Teachers' Association, Atlantic City.

Nov. 14-17—National Council on Schoolhouse Construction, Frankfort, Ky.

Nov. 16-19—Missouri State Teachers' Association, Kansas City.

Nov. 17-19—Louisiana Teachers Association, Baton Rouge.

Nov. 20-23—South Dakota Education Association, Mitchell.

Nov. 22-25—Virginia Education Association, Richmond.

Nov. 24-26—Texas State Teachers' Association, Dallas.

Nov. 25-26—Idaho Education Association, Boise.

Nov. 25-26—National Council for the Social Studies, Pittsburgh.

Nov. 30-Dec. 3—American Vocational Association, St. Louis.

Feb. 25-March 2—American Association of School Administrators, Cleveland.

National Association of Public School Business Officials in this training program for school custodians.

Officers for the ensuing year are: L. H. Schwetye, president, St. Louis; Lee B. Roberts, vice president, Fort Worth, Tex.; J. O. Sattler, secretary, Akron, Ohio; Charles Desselman, financial secretary and treasurer, St. Louis; W. Fred Heisler, chairman of the committee on education, Stillwater, Okla.; John Shephard, chairman of the committee on legislation, Evansville, Ind.

Food Service Conference

Distinguished speakers in the fields of nutrition and education will appear on the program of the annual conference of Food Service Directors to be held at the Seneca Hotel, Rochester, N. Y., November 4 to 5.

Dr. Lydia J. Roberts, University of Chicago, will speak on "Nutrition Needs of the School Lunch Child and Responsibility of the School Lunchroom for Meeting Them." Other speakers and their subjects include: Mary McCormick, New York State Board of Education, "Educational Possibilities of the School Lunchroom"; Dr. George Chatfield, New York State Board of Education, "The Effect of Adequate School Lunches Upon the Physical Growth of School Children"; Dr. Estelle Hawley, "Current Nutritive Standards in Low Cost Lunches," and Alice Easton, Tower Tearoom, Rochester, "Means of Improving Palatability and Attractiveness of Food."

Reports of special conference studies conducted during the year will be given on layouts by Dr. Mary deGarmo Bryan; finance, Dorothea Behm, Syracuse Board of Education, and health promotion, Mary Spaulding, nutritionist, Massachusetts Department of Public Health. Round table discussions of these conference reports will follow.

Members of the American Dietetic Association and the American Home Economic Association of Rochester will be hostesses for the social program which includes visits to hospitals, school lunchrooms and restaurants of the city, as well as other points of interest in the Finger Lake region of New York State.

INSTRUCTION

Reading Disability

Educators conferred with medical authorities of the University of Chicago Clinics on problems of reading disability at a two day conference held during late June on the university campus. More than 900 teachers and school officials from 40 states met to determine what steps can be taken by school administrations to enable children to acquire good reading habits at the elementary, secondary and junior college levels.

William S. Gray, professor of education of the University of Chicago, predicted that the conference would have wide influence on this problem, which has assumed social aspects because of the rapidly increasing demands of society and educational agencies.

The participation of medical authorities was significant, Professor Gray said, because it demonstrated the medical profession's interest in the relationship between the technical defects they meet constantly in practice and the problems of human relationships in the schools.

Cafeteria Short Course

So successful was the second School Cafeteria Managers' Short Course held at Oklahoma A. & M. College, Stillwater, that definite dates have been set for the third event during the week of June 5, 1939. Thirty-nine cafeteria managers enrolled for this year's session to hear talks by Dr.

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Daisy I. Purdy, head, household science department, Oklahoma A. & M. College; M. Faith McAuley, director of food service, Hull House, and formerly head of the institution economics department of the University of Chicago, and Dr. Margaret A. Ohlson, associate professor of foods and nutrition, in charge of human nutrition research, and dietitian for the College Hospital, Iowa State College, Ames.

Self-Supporting College

A self-supporting junior college will be inaugurated in El Reno, Okla., in the fall through pledged enrollments. Liabilities neither for instructional expense nor for maintenance will be assumed until adequate income is assured definitely, according to Paul R. Taylor, superintendent of the city school system. Additional teachers will be added to the faculty at the rate of one teacher for approximately each 25 students who enroll in the junior college. Instructors in the junior college will serve part time in the high school department according to present plans.

Government Management

The University of Denver will institute training for a new profession, that of appraiser of the efficiency of city and county governments, in September under a grant for the first year of $29,000 from the Alfred P. Sloan Foundation of New York.

Graduates of the eighteen months' course will receive the degree, master of science in government managment, and will qualify as research aids to citizen groups attempting to check waste in local government and to improve public welfare services.

Ten fellowships, ranging from $900 to $1800, are being offered on a competitive basis to men and women graduates of accredited colleges and universities in all parts of the country.

FINANCE

Virginia Increases State Aid

Virginia has increased state aid for public school libraries from $33,000 to $100,000 for the biennium which began July 1, 1938. Since state funds are required to be matched, this action practically assures expenditures of $400,000 for books in Virginia's school libraries during the next two years. The county and regional library law in Virginia has been amended to permit boards of supervisors or other governing bodies of any county in which no free library system has been established to appropriate public funds for the support and maintenance of free public library service operated and conducted by a company, society or association.

Custodians in Minnesota

Approximately seventy-seven engineer-custodians gathered at the University of Minnesota to attend the summer school held under the University Exension Service. The school was in charge of K. P. Grabarkiewicz, principal, and W. C. Kobs. Most of those participating registered from Minnesota, but all other parts of the Northwest were represented, also as far south as Kentucky, east as far as Michigan and west as far as Montana. Included in the group was one woman, Mrs. Hazel Potts of Ah-Gwah-Ching, Minn.

BUILDINGS

Tenafly Looks Ahead

Almost two decades ago the borough of Tenafly, N. J., established restrictive zoning ordinances for the development of a comprehensive city plan. Improved transportation facilities, such as the George Washington Bridge, indicated a vigorous future population growth in the suburb. To preserve the attractiveness of the suburb's residential character, as well as to provide adequate school facilities for a rapidly growing population, Tenafly's citizens asked the division of field studies of Teachers College, Columbia University, to survey its school buildings.

An analysis of trends in house values and residential saturation confirmed predictions of the future population growth in the suburb. Evaluation of the adequacy and utilization of the borough's present school plant, examination of the school's policy with respect to nonresident tuition pupils and analysis of the community's financial status were covered in the survey.

A new measure of probable future school building needs was developed during the survey in the computation of the "potential pupil-years per home." This measure, which was based on the number of years children in the community's homes will require on the average to complete their schooling, was correlated with trends in the value of new house construction.

A school building program to be completed within the next twenty years was recommended. This emphasizes the maximum future use of the present school plant, a close adaptation of school building projects both to population growth and to educational needs and the development of a sound policy in the financing of the program.

A basic consideration was the con-

tribution of the school program to the community's attractiveness and to the quality of its housing through acquisition of sites of adequate size and desirable location and through apropriate architectural features of school building construction.

May Establish Two Junior Colleges

The St. Louis Board of Education has voted to establish two free junior colleges, one for Negroes, constituting an $8,000,000 building program. A proposed $4,400,000 bond issue was submitted to voters at the August 2 primary. If approved, the remainder will be made up by a federal grant of $3,600,000 for which application already has been made.

N. Y. C. Abolishes School Post

The New York City Board of Education has amended its by-laws to achieve drastic reorganization of the bureau of construction and maintenance of the school system. The board's action has resulted in the removal of Walter C. Martin from his post as superintendent of school buildings and will divide the present bureau in two. The duties previously assigned to Mr. Martin will be apportioned between two new appointees, a superintendent of school buildings, design and construction and a superintendent of plant operation and maintenance.

The bureau of construction and maintenance of the school system, which Mr. Martin has headed for nearly ten years, recently has been criticized by Mayor F. H. La Guardia, according to the *New York Herald-Tribune,* for alleged delay and lack of originality in the design and erection of school buildings. A commission of private architects, which spent $30,000 last year to survey school architecture, also found many serious faults in the operation of Mr. Martin's department.

Mr. Martin has been receiving $25,000 a year and will be retired on an annual pension of about $7,000. His two successors will receive combined salaries of about $30,000 a year.

RESEARCH

N. Y. U. Safety Fellowships

Graduate students enrolled in the New York University school of education for the coming academic year will be awarded twenty-four research fellowships and tuition scholarships in safety education valued at approximately $11,500 by the university's new national center for safety education.

The awards were made available coincident with the opening of the safety center. They will carry annual stipends ranging up to $1200.

The safety center, the first of its kind, has been set up under a special grant of funds from the National Conservation Bureau, which is maintained and administered by 61 casualty insurance companies. It will be under the direction of Dr. Herbert J. Stack, formerly director of the bureau's education division.

The safety education center will offer degree-credit courses for graduates and undergraduates in safety education; materials and methods of teaching safety on both elementary and secondary school levels; curriculum building on safety education; driver training and traffic safety in secondary schools; organization and administration of safety education; safety procedures in vocational and physical education; advanced first aid; home safety and first aid; industrial accident prevention, and essentials in traffic control.

Ten tuition scholarships will be provided for directors and supervisors of safety in the metropolitan area to enable them to work for advanced degrees in safety education while continuing in their positions, according to the announcement.

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PERSONNEL

Information, Please!

The news bulletin of the Chicago Teachers Union reports that an organizer for a typographical union, who has been trying to organize the workers in an open shop printing plant that issues the Chicago telephone directory, has requested Chicago teachers to refrain from using telephone directories and magazines printed by that company.

W.P.A. Absorbs Teachers

More than 100 unemployed teachers will be given jobs on W.P.A. adult education projects in Oklahoma as a result of new quota increases. The work will be in nursery schools, correspondence study and parent education.

COURT DECISIONS

Bans Negroes

A decision handed down recently by the Missouri State Supreme Court closed the doors of the University of Missouri to Negroes. The high court in a unanimous decision upheld a county circuit judge in his refusal to grant a St. Louis Negro a writ of mandamus forcing university officials to admit him to the school of law. The high tribunal held that the statutes provided equal higher educational facilities for Negroes through the act creating Lincoln University and the appropriation to pay tuition fees for Negro students in adjacent schools if Lincoln does not provide the course they want.

Upholds Part-Time Tenure

The right of a teacher to acquire tenure in a part-time position was upheld recently by the New Jersey commissioner of education in the case of Elizabeth Fox *v.* the New Providence Board of Education. It also was pointed out in the decision that a teacher might have tenure in two school districts at the same time.

Miss Fox had taught home economics part-time in New Providence for nearly eleven years. "Economies" resulted in refusal of the board of education to renew her contract.

The commissioner held that if a teacher's latest employment is one day a week, then she is protected in one day a week employment as long as that type of position continues. The commissioner also said, "A teacher could teach one-third of her time in one district and two-thirds in another and if such employment continued for more than three consecutive academic years, tenure would be acquired in each district so long as those types of positions continue.

PUBLICATIONS

New A.L.A. Journal

The American Library Association has launched a new quarterly *Journal of Documentary Reproduction* to inform librarians of developments in the reproduction of documents. The *Journal* will supplement and keep up to date *Microphotography for Libraries*, published by the association in 1936 and 1937 and edited by M. Llewellyn Raney, director of the University of Chicago libraries. Charles E. Rush associate librarian of Yale University library, is chairman of the editorial board of the new publication.

RADIO

First School Station

If the Federal Communications Commission grants the petition of the New York City Board of Education for a noncommercial educational high frequency wave length, this will be the

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first school system in the country to have its own broadcasting station.

Under present plans the station will begin operating this fall. Most of the necessary equipment for a broadcasting plant already has been installed at Brooklyn Technical High School where the station will be operated.

Last spring Dr. Harold G. Campbell, superintendent of New York City schools, conducted a radio experiment in the public schools, using the facilities of the city station WNYC. The series of daily broadcasts made on the elementary and secondary school levels convinced Doctor Campbell that the schools needed their own station since the number of programs that could be given depended upon the amount of time allocated to the schools by the city station. If the board has its own station, as many broadcasts can be sent daily as are deemed advisable.

It is almost impossible, Doctor Campbell said, to get programs from existing stations that are suitable for classroom use. He also indicated that evening programs might be broadcast from the proposed educational station.

Doctor Campbell did not anticipate difficulty in obtaining allocation of short wave length, since the commission already has provided for educational broadcasting by short wave lengths.

Damrosch to Return

On October 7 the N.B.C. Music Appreciation Hour will begin its eleventh season under the direction of the dean of American conductors, Walter Damrosch. As in the past, the course will consist of four series of concerts, graded to meet the requirements of different age levels.

Mark 3000th Broadcast

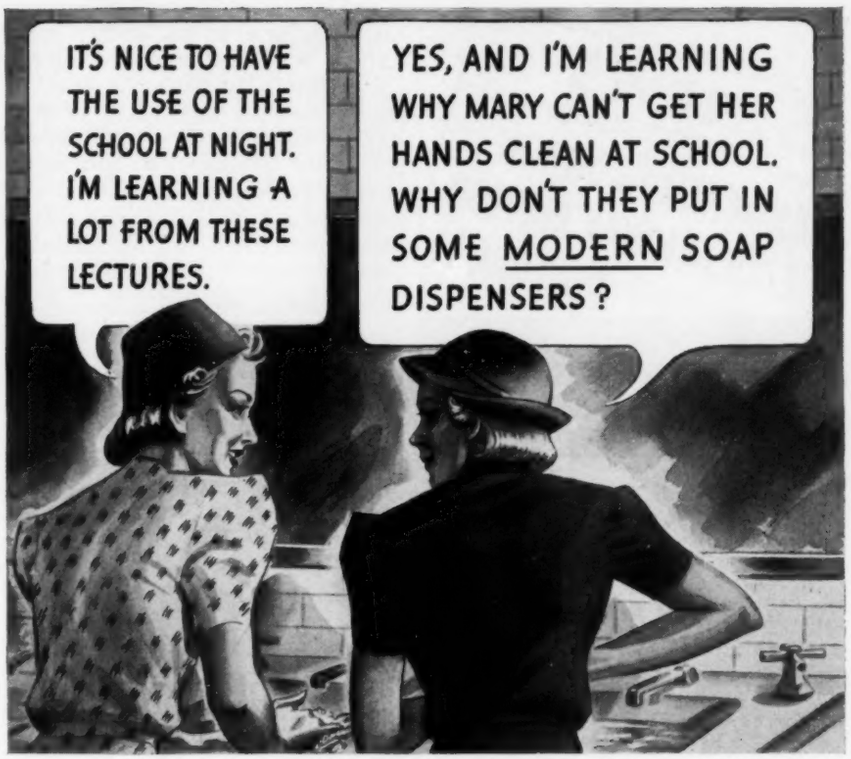
The three thousandth broadcast of the National Farm and Home Hour was celebrated recently with comments by Henry A. Wallace, secretary of agriculture, who discussed the social significance of this hour and other sustaining educational programs.

Radio Is Attraction

Nine hundred delegates to the N.E.A. convention jammed the C.B.S. Playhouse in New York to witness a demonstration of the technic of adapting radio's educational facilities to the schoolroom. Admission was refused to 500 delegates.

A program patterned after the "American School of the Air" was presented and served as the focal point of an expert round table and a question and discussion period by the entire audience.

The stage of the theater was evenly


IT'S NICE TO HAVE THE USE OF THE SCHOOL AT NIGHT. I'M LEARNING A LOT FROM THESE LECTURES.
YES, AND I'M LEARNING WHY MARY CAN'T GET HER HANDS CLEAN AT SCHOOL. WHY DON'T THEY PUT IN SOME MODERN SOAP DISPENSERS?

Even your budget will welcome these modern soap dispensers

Schools today are playing an increasingly important part in adult education. They are developing rapidly as community centers. Obviously, then, school washrooms and their appointments get more careful scrutiny—more criticism.

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NEWS

ANOTHER SCOOP IN EDUCATIONAL MOTION PICTURES!

Many New *Grand National* Films Available for Fall Semester

IN addition to the recent scoop of dozens of Hollywood-produced Universal feature pictures on 16 mm. film, Bell & Howell now has obtained 36 recent Grand National hit films. These, and many other newly acquired features and shorts from M. G. M., R. K. O., and Gaumont-British, will be exclusively distributed by the B & H Filmosound Library to educational users of 16 mm. sound-on-film projectors.

These are recent releases, many of which are still appearing in theater lights. Just glance at a few sample titles and stars! *Great Guy* with Jimmy Cagney! *Small Town Boy* with Stuart Erwin! *White Legion* with Ian Keith! *Yellow Cargo* with Conrad Nagel! *Dr. Syn* with George Arliss! And 42 others, all carefully selected and specially edited to insure their suitability for school audiences.

Plan to use some of these films this fall. Send coupon for a complete list and details about how they can best be used in connection with various school subjects.

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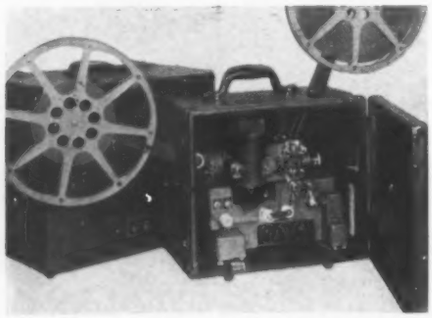

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divided by a screen, with a regular group of C.B.S. actors, an orchestra and technical staff on one side and a class from the high school of Bronxville, N. Y., on the other. After the simulated broadcast, Dr. Ignatius Donnelly Taubeneck, director of social studies and public speaking at the Bronxville High School, guided the class through a forty minute spirited discussion of the program.

Seek Radio Careers

Sixty-three students, theater directors, attorneys, librarians, a dietitian, salesmen, brokers, writers, musicians, college and high school teachers and a college dean all are registered for the N. Y. U. radio workshop this summer. This six week course is designed to give practical training to persons interested in radio as a career.

Travels in Kentucky

A series of "Travels in Eastern Kentucky" is being broadcast by the University of Kentucky during August and September, designed principally for the University Listening Centers in the mountains and schools in each county under discussion.

VISUAL EDUCATION

Depicts Children's Museum

A children's museum program introducing the city child to the world outside his experience, supplementing the work of the home and the school in this respect, is demonstrated in "The Child Explores His World," a two reel 16 mm. silent motion picture just completed by the Harmon Foundation, Inc., of New York.

The children's museum upon which the film is based is that of Brooklyn, N. Y., which is the largest existing institution of its type. Founded in 1899, this museum was not only the first of its kind in the world, but also one of the first attempts at progressive education, foreshadowing modern developments in school technics.

In an informal atmosphere approximating that of the playroom, children are seen absorbed in handling and examining papier-mâché plant and insect models, mounted specimens and actual living things.

Field trips outside the museum and educational lecture or motion picture programs introduce the child to reality and prepare him for the adult world.

The museum appears as a positive step toward prevention of juvenile delinquency and as an aid to later vocational adjustment, for a museum hobby frequently has developed into a life's work.

The prime purpose of the film, it is explained, is to encourage organizations and communities in the creation of museums for children and to realize that such work can be started at little expense, once enthusiasm for it has been aroused.

"The Child Explores His World" already is being used by adult mu-

Films for the School Screen

Physiology, Health and Hygiene

Body Framework—How the skeleton determines the shape and size of the body; how it protects vital organs; changes during growth. 1 reel. 16 mm., silent. For rent or for purchase. Eastman Kodak Company, Teaching Films Division, Rochester, New York.

How Life Begins—Sketches of the biology of reproduction from a very simple form to a human being. 4 reels. 16 and 35 mm., silent. For rent or for purchase. American Social Hygiene Association, 50 West Fiftieth Street, New York.

Circulatory Control—The pressure of blood in the arteries; methods of measuring blood pressure; the structure and work of the veins; nature's method of vasomotor control. 1 reel. 16 mm., silent. For rent or for purchase. Eastman Kodak Company, Teaching Films Division, Rochester, New York.

Man—Contrasting the lowest form of life, the ameba, with man, the highest. How organs are connected with the nervous system and the brain. 12 minutes. 16 and 35 mm., silent. For purchase only. Herman A. De Vry, Inc., 1111 Center Street, Chicago, Ill.

How We Breathe—Animated drawings and photography show formation of the human lungs and how they function in purifying the blood. ¾ reel. 16 mm., silent. For purchase. Edited Pictures System, Inc., 330 West Forty-Second Street, New York.

General Personal Hygiene—Science of Life Series. Standards of health promotion, exercise, good air, sunshine, sleep, cleanliness, footwear, care of teeth, eyes and hair, mental health and heredity. 16 and 35 mm., silent. For rent or for purchase. Bray Pictures Corporation, 729 Seventh Avenue, New York.

seums in their stimulative programs and by teacher training classes in visual methods. Distributed through the Harmon Foundation, New York, it will soon be available to clubs, civic organizations, parent-teacher associations, churches and the like.

Visual Education Conference

More than 600 outstanding visual educators, motion picture executives, industrial film producers and representatives of various commercial organizations using visual aids met June 20 to 23 at the Francis Parker School in Chicago for the eighth session of the National Conference on Visual Education and Film Exhibition.

A resolution was introduced proposing the organization of a group for disseminating information in the visual education motion picture field, patterned after the Professional Photographers or the Biological Photographers Associations in their respective fields. The proposed organization would cover both the use of visual aids and their technical production.

Disney Given Harvard Degree

The real democratic spirit of Harvard University, its supporters have pointed out, was shown at the 1938 commencement when Walt Disney, creator of "Snow White and the Seven Dwarfs," received the honorary degree of master of arts from the institution. The only formal education the Hollywood creator of animated cartoons ever received was a year at McKinley High School in Chicago, with a night school course at the Academy of Fine Arts.

NAMES IN NEWS

Superintendents

Dr. Alexander J. Stoddard, superintendent of schools, Denver, Colo., is the choice for the post of superintendent of Philadelphia schools, it has been reported by the *Philadelphia Record*. Doctor Stoddard was elected for a six year term beginning August 1 and will receive a salary of $15,000, which is subject to a 10 per cent reduction. He has served one year of a five year contract in Denver.

Dr. Ernest W. Butterfield, who for the last eight years has been commissioner of education for the state of Connecticut, has accepted the post as superintendent at Bloomfield, Conn., for a three year term.

Herbert Spencer Jones, appointed acting superintendent of schools at Gary, Ind., on April 15, following the death of Dr. William A. Wirt, has been made superintendent.

Kenneth C. Ray, superintendent of schools, Athens County, Ohio, has been elected superintendent at Zanesville, Ohio, beginning in September.

Dr. John C. Unger will leave his post as superintendent of schools at Hugo, Colo., this fall to become superintendent at Brighton, Colo. Doctor Unger has been on the summer faculty of the University of Colorado for two years. This summer he is teaching courses in rural activity program and instruction in rural schools.

Pearl Windsor, principal of the high school at Iron River, Mich., since 1918, was elected superintendent of the Iron River school district recently.

Oral F. Patterson, who for the last year has been superintendent of the Wakefield Township schools at Wakefield, Mich., was appointed superintendent of city schools at Elgin, Ill., recently, succeeding Theodore Saam, who resigned to take a similar post in Western Springs, Ill.

John J. McPherson has replaced E. D. Murdock as superintendent of schools in Lidgerwood, N. D. Mr. Murdock left Lidgerwood after eight years to take over the position of director of vocational training at Billings Polytechnic Institute, Billings, Mont.

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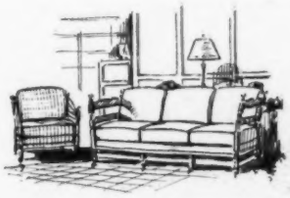

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RAYMOND N. BROWN, who recently resigned as superintendent of schools in Thomaston, Conn., has been named superintendent in Meriden, Conn., to succeed NICHOLAS MOSELEY, who resigned several weeks ago.

WILLIAM HENRY SHAW has resigned as principal of Needham B. Broughton High School, Raleigh, N. C., to become city superintendent at Sumter, S. C.

HARRY A. WILLIAMS, superintendent of schools at Fruita, Colo., for the last four years, will accept the superintendency of Paonia, Colo., this fall.

JOHN G. HANSEN has been elected superintendent of schools in Fremont, Neb.

VERL A. TEETER, director of the municipal juvenile court at Tulsa, Okla., for four years and director of vocational guidance and placement, Tulsa city schools from 1925 to 1933, has been elected superintendent of schools in McAlester, Okla.

EDWARD WALDRON of Orange, N. J., has been named superintendent of schools, New Canaan, Conn., succeeding the late FULLER L. AUSTIN.

GILBERT R. LYON, supervising principal at Smithtown Branch, Long Island, N. Y., for ten years, will succeed DR. E. R. VAN KLEECK as superintendent of schools in Norwich, N. Y. As previously announced, Doctor Van Kleeck has accepted the superintendency of schools at Grosse Pointe, Mich.

ROBERT T. REED, acting superintendent of the Alamo Heights Independent School District, San Antonio, Tex., and until recently principal of the high school, has been named superintendent of the district, effective September 1.

S. H. SHERMAN, for the last eight years superintendent of schools at Jesup, Ga., has been elected superintendent at Statesboro, Ga.

PHILIP MITCHELL has been named superintendent at Arapahoe, Neb., to succeed JOHN RICE, who resigned.

HOWARD P. LARRABEE, superintendent of schools at East Bridgewater, Mass., has been elected superintendent at Concord, Mass.

TERRY WICKHAM, assistant county school superintendent, has been selected as superintendent of the new $500,000 Cuyahoga Heights School, Cuyahoga Heights, Ohio.

C. H. DILLEHAY, superintendent of schools at Hereford, Tex., has been made superintendent at Vernon, Tex., succeeding W. T. LOFLAND.

HARRY O. EISENBERG, principal of the high school at Bangor, Pa., was elected superintendent of Bangor school district recently succeeding O. W. ACKERMAN, who retired as superintendent July 1. DONALD B. KEAT, Bangor high school teacher since 1926, was elected high school principal.

FRED C. GILLESPIE, principal of the high school at Duquesne High School, Duquesne, Pa., has been elected superintendent of the Duquesne city schools.

R. K. SALISBURY has been appointed superintendent of schools in Greenhills, Ohio, a suburb of Cincinnati.

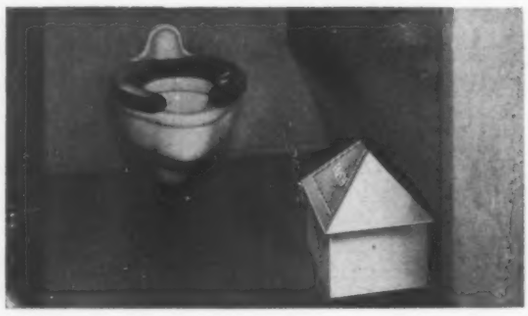
DR. THOMAS W. GOSLING, recently national director of the American Junior Red Cross, has been appointed assistant superintendent of the public schools of the District of Columbia.

Principals

J. C. RICE, superintendent of schools at Corydon, Ind., for the last eight years, has been appointed principal of the high school at Martinsville, Ind., as successor to GLEN M. CURTIS.

FRANK A. WHITLOCK, oldest teacher in point of service in Lackawanna County, Pa., will crown his final year of teaching by becoming principal of a new $100,000 consolidated high school, which will house more than 400 pupils of the consolidated Newton and Ransom Township School District in that county.

E. A. SOUTHWORTH has been appointed principal of Carpinteria Union High School, Carpinteria, Calif., succeeding JESSE M. HAWLEY, who has resigned to



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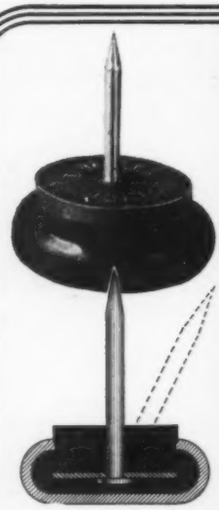

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become principal of schools at Fillmore, Calif.

T. P. Shelburne Jr., 25 year old schoolman of Richmond, Va., is the new principal of the high school at Bristol, Va.

F. Earle Williams, principal of Agawam High School, Agawam, Mass., has been elected principal of the high school at Gardner, Mass.

Loyal Hoshaw, principal of the Delphi Junior High School at Delphi, Ind., has signed a contract to become principal of the high school at Rensselaer, Ind.

Vincent Sala, principal of the Washington Junior High School, New Britain, Conn., has been named principal of the senior high school.

Paul Shull of Lewistown, Pa., has been named principal of the high school at Waynesboro, Pa., to succeed Huber D. Strine, resigned.

Leslie R. Jones, 42 year old high school teacher, has been named principal of Briscoe Junior High School, Beverly, Mass.

Wilbert M. Leonard was named supervising principal of Barnesboro Borough schools and William J. Taylor, high school principal, at Barnesboro, Pa.

Herbert Book recently was elected director of secondary education in the Laboratory School at Slippery Rock, Pa., a position that corresponds to that of high school principal. He succeeds A. B. Denniston, who recently was elected superintendent at Greenville, Pa.

Joseph La Sitis has been elected supervising principal of the schools at Emporium, Pa. Mr. La Sitis has been with the Emporium schools for eight years, four of which were as principal of the high school.

Frank Brimmer is the new supervising principal of the Arcade High School, Arcade, N. Y.

In the Colleges

Dr. John A. Bartky was elected president of the Chicago Teachers' College recently to succeed Dr. V. O. Graham, who was transferred to the principalship of the Norwood Park Elementary School, Chicago. Doctor Bartky formerly was superintendent of elementary schools on the south side of Chicago.

Prof. William McPherson, 74, a noted chemistry authority and professor emeritus, was named acting president of Ohio State University to succeed George W. Rightmire, who retired July 1.

Chancellor E. A. Burnett of the University of Nebraska has retired at the age of 72 years. Dr. C. S. Boucher, president of West Virginia University, Morgantown, has been appointed to succeed Chancellor Burnett, who will become chancellor emeritus on September 1. Doctor Boucher, 52, is a former dean of the arts college at the University of Chicago.

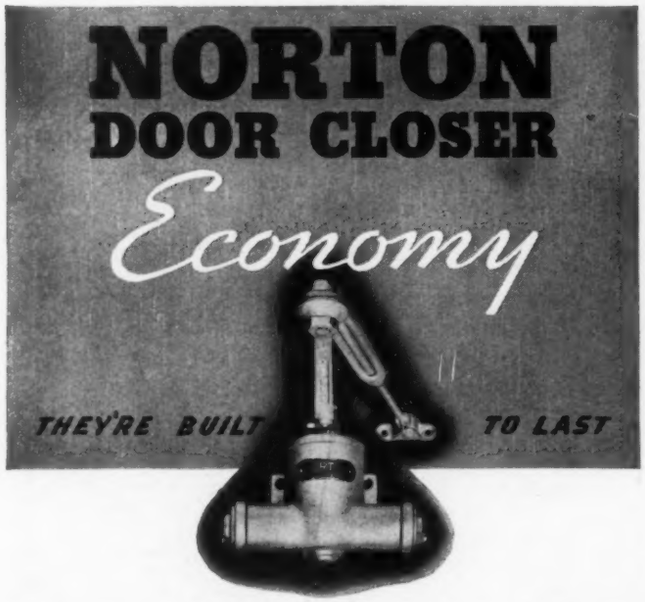
Leonard B. Wheat, superintendent of schools at Western Springs, Ill., will become head of the department of education and assistant dean in the school of arts and sciences, Central Y.M.C.A. College, Chicago, on September 1.

Janet Howell Clark, formerly associate professor and now lecturer at Johns Hopkins University, and since 1935 head of the Bryn Mawr School in Baltimore, has been appointed professor in the division of biological sciences and dean of the college for women at the University of Rochester.

Dr. Charles Maxwell McConn, dean of Lehigh University for the last fifteen years, has been appointed dean of Washington Square College, New York, effective September 1.

Philip H. Falk, superintendent of schools at Waukesha, Wis., became the new president of the Central State Teachers College, Stevens Point, Wis., to succeed Frank S. Hyer on July 1.

Charles Henry, superintendent of public schools, Dillon, Mont., and direc-



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tor of training at Montana State Normal College for the last twelve years, has resigned. PAUL L. ANDERSON, who is completing graduate work for the Ph.D. degree at the University of Minnesota, was named to succeed him. Mr. Henry will remain on the normal college staff as professor of education.

DR. STEWART GRANT COLE, retiring president of Kalamazoo College, has joined the University of Chicago faculty as an associate of DR. RALPH TYLER, head of the department of education and chief examiner of the university. DR. PAUL LAMONT THOMPSON of Shurtleff College, Alton, Ill., is Doctor Cole's successor at Kalamazoo College.

LIDA LEE TALL, president of the Maryland State Teachers College, Towson, Md., has announced her resignation. M. THERESA WIEDEFELD was selected as her successor.

ARCHIE MACINNES PALMER, secretary of the Cornellian Council of Cornell University, has been selected to succeed DR. ALEXANDER GUERRY as president of the University of Chattanooga. Doctor Guerry left July 1 to become vice chancellor of the University of the South, Sewanee, Tenn.

DR. HAROLD B. ALBERTY is the new director of University Schools at Ohio State University, succeeding DR. RUDOLPH D. LINDQUIST, who has gone to Cranbrook School at Bloomfield Hills, Mich. Doctor Alberty has been on the faculty of education since 1924.

DR. HARRY LEE UPPERMAN will be inaugurated as chancellor of Nebraska Wesleyan University, Lincoln, in September. He has been acting chancellor for several months.

DR. WILLIAM H. COWLEY, 39 year old member of the Ohio State University faculty, took office August 1 as president of Hamilton College, Clinton, N. Y., to succeed DR. FREDERICK C. FERRY, who has reached retirement age. Doctor Cowley was professor in the bureau of educational research at Ohio State.

DR. WALTER G. CLIPPINGER, president of Otterbein College since 1909, has informed the board of trustees that he desires to retire September 1.

IRA WOODS HOWERTH, professor emeritus of sociology, Colorado State College of Education, died on July 4 of heart failure. He has contributed several articles to The NATION'S SCHOOLS, the last of which appeared in the July issue.

Headmasters

FRANCIS J. HORGAN is one of four new headmasters appointed by the Boston school committee. Mr. Horgan will direct the Charlestown High School. Other new appointees are: LOUIS A. MCCOY to the Girls' High School, FRANCIS J. LYONS to the Emerson district and MARY A. HAVERTY to the Hancock district.

C. LAMBERT HEYNIGER, assistant headmaster at Lawrenceville School, Lawrenceville, N. J., has been appointed headmaster of the Lebanon School, a preparatory school for boys at New Lebanon, N. Y.

CAROLINE RUUTZ-REES will retire as headmistress of Rosemary Hall, fashionable school for girls at Greenwich, Conn., at the end of the current term. She will be succeeded by MRS. EUGENIA JESSUP.

EUGENE B. LAWRENCE, assistant headmaster of Bulkeley School, New London, Conn., will complete forty-six years of service upon retirement this year.

Miscellaneous

ORDWAY TEAD, lecturer on personnel administration at Columbia University, author, editor and educator, was elected chairman of the New York Board of Higher Education recently.

LOIS M. CLARK has been appointed adviser in elementary education in the Pennsylvania State Department of Public Instruction. She succeeds MARGARET P. DURKIN, who has been transferred to the division of health education to assist in the audiometric testing program.

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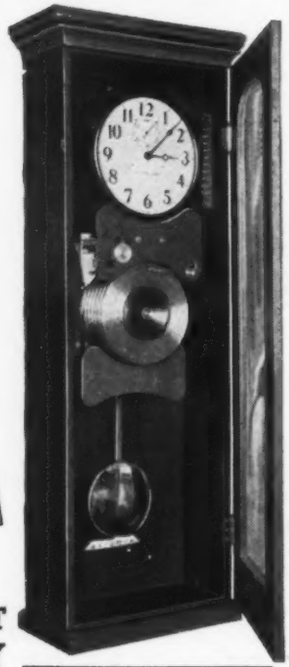

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THE BOOKSHELF

CITY SCHOOL ADMINISTRATIVE CONTROLS. *By Jesse B. Sears. McGraw-Hill Series in Education. New York: McGraw-Hill Book Company, Inc.,* 1938. *Pp.* xviii+281. $2.50.

An attempt to develop underlying principles in the administration of city school systems, approached from the organizational rather than the personnel point of view. An attempt to synthesize administrative procedure through analysis of good working practice.

THE FLIVVER KING. *A Story of Ford-America. By Upton Sinclair. Emaus, Pa.: Rodale Press. Pp.* 256. $1.50.

The author presents the evolution of Henry Ford from mechanic to billionaire.

ISAAC NEWTON 1642-1727. *By J. W. N. Sullivan. New York: The MacMillan Company,* 1938. *Pp.* xx+275. $2.50.

This author's final work is the portrait of Newton the man, carefully constructed after ten years of study and writing. A valuable addition to the biography of men of science.

IMPROVING INSTRUCTION. *Supervision by Principals of Secondary Schools. By Thomas H. Briggs. New York: The Macmillan Company,* 1938. *Pp.* ix+587. $2.50.

Much needed presentation of supervision for secondary schools. Wise use of this material should be exceedingly helpful in improving instruction in the secondary field.

MICHIGAN TODAY. *Its Human and Physical Resources as They Affect Education. Bulletin No.* 307. *Lansing, Mich.: Department of Public Instruction. Pp.* 301. $0.25 *(Paper Cover).*

Excellent background material through which the students may become familiar with the state in which they live. Has appeal for other states.

TEACHING FOR HEALTH. *By Marguerite M. Hussey. New York City: New York University Bookstore,* 1938. *Pp.* xiv+312. $2.75.

Designed for teachers and administrators; a well-organized presentation with special emphasis on relating health education to the community.

THE CANADIANS. *The Story of a People. By George M. Wrong. New York: The Macmillan Company,* 1938. *Pp.* viii+455. $3.50.

Interestingly written history of Canada from the earliest French settlements to the emergence of Canada as an independent nation; a study in evolutionary contrasts with the United States. Should be on every secondary library shelf.

A HANDBOOK OF PRIVATE SCHOOLS FOR AMERICAN BOYS AND GIRLS. *An Annual Survey. Twenty-Second Edition. By Porter Sargent. Boston: Porter Sargent,* 1938. *Pp.* 1200. $6.

Not only a handbook of information and a complete directory of nonpublic schools, but an interesting introductory commentary on educational matters in general. Should be in every principal's reference library.

MEASURING MUNICIPAL ACTIVITIES. *A Survey of Suggested Criteria and Reporting Forms for Appraising Administration. By Clarence E. Ridley and Herbert A. Simon. Chicago: The International City Managers' Association,* 1938. *Pp.* v+102. $2 *(Paper Cover).*

A worthy attempt to suggest means for appraising municipal activities. Some of the divisions, including education, somewhat oversimplified.

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TARNISHED WARRIOR: MAJOR-GENERAL JAMES WILKINSON. *By James Ripley Jacobs. New York: The Macmillan Company,* 1938. *Pp.* xv+380. $3.50.

True story of a revolutionary notable who rose quickly to be general in the Revolutionary army and whose subsequent career was of doubtful character; an opportunist, grafter and schemer whose lack of vision and principle brought dubious rewards. A good biography.

TEACHING PROCEDURES IN HEALTH EDUCATION. *By Howard L. Conrad and Joseph F. Meister. Philadelphia: W. B. Saunders Company,* 1938. *Pp.* 160. $1.75.

Textbook for prospective teachers of health education.

A STUDY OF A METHOD OF MEASURING MUSCLE COMPRESSIBILITY. *By West Joseph Altenburg. Ann Arbor, Mich.: The Ann Arbor Press,* 1938. *Pp.* 61. $1.25.

Development of a new instrument to study muscle quality through determination of compressibility.

ROOM TO SWING A CAT. *Being Some Tales of the Old Navy. By Frederick J. Bell. New York: Longmans, Green and Co.,* 1938. *Pp.* 272. $3.

Life stories of the early American Navy when sleeping room was at a premium on our frigates; some of them well worn retold tales; others are new.

YOUR WASHINGTON. *By Mary Field Parton. New York: Longmans, Green and Co.,* 1938. *Pp.* xiii+193. $2.

Popular guide for those planning to visit Washington. Simple maps and illustrations.

ADAPTABILITY OF PUBLIC SCHOOL SYSTEMS. *By Paul R. Mort and Francis G. Cornell. Prepared Under the Auspices of Columbia University Council for Research in the Social Sciences. New York: Bureau of Publications, Teachers College, Columbia University,* 1938. Pp. xii+146. $2.10.

Study of the effects of social and economic forces on the adaptability of school systems. Much needed emphasis on appraisal of functioning.

HOW TO WRITE JOB-GETTING LETTERS. *By Richard H. Morris. New York: Harper & Brothers,* 1938. *Pp.* 58. *Lithoprinted.* $1 (*Paper Cover*).

Valuable examples and suggestions to improve the present low state of letters of application. Upper secondary library.

Just Off the Press

TARGETS IN READING. *For High School Students. By Linda E. Barry, Mable Madden and Marjorie Pratt. St. Louis: Webster Publishing Company,* 1938. $0.56 *(Paper Cover).*

WAR IN CHINA. *America's Rôle in the Far East. By Varian Fry. Illustrated by Henry Adams Grant. Headline Book No.* 13 *of The Foreign Policy Association. New York: Silver Burdett Company,* 1938. *Pp.* 95. $0.25 *(Paper Cover).*

WHY WOMEN WORK. *Based on a Study Made by The National Federation of Business and Professional Women's Clubs, Inc. Public Affairs Pamphlet No.* 17. *New York: Silver Burdett Company,* 1938. *Pp.* 32. $0.10 *(Paper Cover).*

STUDENT'S ASSIGNMENT BOOK WITH STUDY AIDS. *By Ernest Choate. Philadelphia: The Circle Book Company,* 1938. *Pp.* 96. $0.20 *(Paper Cover).*

THE ADVENTURES OF MONTE AND MOLLY. *By Darwin James Adams. Illustrations by L. Franklin Van Zelm. New York: The Macaulay Company,* 1938. *Pp.* 152. $2.

PUBLIC ADMINISTRATION ORGANIZATIONS. A DIRECTORY. 1938-1939. *Edited by Robert M. Paige. A Biennial Publication of Public Administration Clearing House. Chicago: Public Administration Service,* 1938. *Pp.* xi+183. $1.50.

THE STRUGGLE OVER SLAVERY. *By Robert B. Weaver. Chicago: The University of Chicago Press,* 1938. *Pp.* vii+84. $0.40 *(Paper Cover).*

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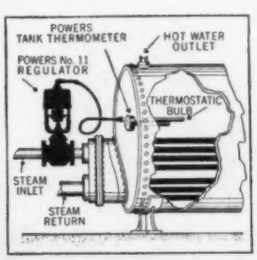

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NOTES FOR BUYERS

Sun in Shade

Putting sunshine in the shade is the business of the Luther O. Draper Shade Company of Spiceland, Ind., which has recently announced a new unit designed to cover even the widest of windows. The very wide windows that are being built into modern schools are magnificent but they present the problem of how to keep Old Sol in his place.

The Draper X-L window shading unit, it is stated, efficiently and economically provides for window openings that are too wide to be equipped successfully with one shade. The unit includes an L shaped shield in any required number of sections supporting as many shades as are necessary to cover the space properly. By means of special brackets, each shade is overlapped by another shade and operates independently to admit light as desired. It is also said to eliminate streaks of light between the shades.

Either translucent cloth or cloth to darken the room can be furnished. The unit with black shades is particularly recommended for darkening schoolrooms for visual education. It may be installed to operate over shades used for the customary lighting requirements.

Death Rays

It's getting harder and harder for an honest germ to get along in this world. Even the healthful ultraviolet ray, beneficial to man and beast, has been turned into a weapon for the extermination of germs.

The latest medium for waging war on bacteria is the Sterilamp of Westinghouse Electric & Manufacturing Company, Lamp Division, Bloomfield, N. J., which is offered as a way to sterilize drinking glasses.

By exposing glasses and utensils to the rays of a Sterilamp for a short time, it is claimed, complete sterilization is obtained. The addition of Sterilamps to storage shelves provides a means of maintaining previously sterilized glasses or utensils in a sterile condition during periods of storage until they are required for use. Trays of glasses may be sterilized in two to three minutes, Westinghouse asserts, depending upon the distance of the radiation source from the glasses.

The Sterilamps are slender rod-shaped glass tubes with effective lengths of 10, 20 or 30 inches. Two types of fixtures are available. A special power unit is used for energizing the tubes.

Portable Refresher

What a refreshing idea for a hot day is that of a shower that can be carried around with one! And there are showers, we are informed, that can be carried anywhere by one man. This ingenious contrivance is the Weisway cabinet shower introduced by Henry Weis Mfg. Co., Inc., Elkhart, Ind.

It is distinguished, according to its maker, by an interlocking assembly at corners and connection of sidewalls to the receptor, without benefit of nuts and bolts. Since each wall panel is rigidly engaged at the receptor, corners and top frame the completed shower is virtually an integral unit. The company claims it cannot leak.

A special feature is the floor, made of a foot-gripping, nonslipping vitreous enamel designed to keep the showertaker firmly on his feet.

Health via Crane

Having plumbed the depths of school sanitation, the Crane Company, 836 South Michigan Avenue, Chicago, bobs up again to report its findings on the relation between plumbing and the above mentioned sanitation.

A 16 page booklet discussing divers aspects of the problem and illustrating Crane installations is offered to the school field for its enlightenment. Some of the subject headings into which the brochure is divided are as follows: modern school sanitation, handwashing in schools, showers and their place in the school, fresh cool water as an aid to health, equipment for household economics departments and equipment for the laboratory.

By way of reminding its public that plumbing is not its only talent, the manufacturer has devoted one page of the catalog to heating equipment, *i.e.* boilers, vacuum heating pumps and radiators.

Quietude

If there is one thing the average boy or girl seems to be able to get along without, it's quiet—in school or out of it. But whether youngsters appreciate it or not, manufacturers of soundproofing materials have provided that in school, at least, noise may be reduced. For which administrators and teachers owe them a rising vote of thanks.

A new product of this nature is Acoustilite, member of the family of the Insulite Company, Builders Exchange Building, Minneapolis. Applied to walls and ceilings, it absorbs sound, reducing echo and its consequent confusion.

It is made in two finishes, one with the appearance of soft-surfaced travertine stone and the other, an open-mesh fabric covering. Both are painted a neutral buff shade and further decorative stenciling in cold water flat paints may be done without impairing the acoustical properties.

Low cost and economical application are further advantages claimed.

More Than Skin Deep

Stygian darkness may sometimes lurk beneath the fairest exterior, but it is not so in the case of the Church Mol-Tex seat, we are told by the manufacturer, the Church Mfg. Co., Holyoke, Mass. Its surface whiteness extends clear through the entire Mol-Tex cover which, housing core, steel hinge plate and brass bearing, is molded under 400,000 pounds' pressure. The toilet seat, it is claimed, is virtually unbreakable; can be hit with a hammer without damage, and resists abuse, dampness, acids and alkalis and cleaning agents.

The Church Company feels that its newest contribution to modern plumbing will be welcomed by school administrators who must purchase equipment with an eye to budget limitations.

Generalities

Dr. Walter A. Jessup, president of the Carnegie Foundation for the Advancement of Teaching, has been elected a member of the board of directors of the Johns-Manville Corporation, 22 East 40th Street, New York, it was announced by Lewis H. Brown, president. From 1916 to 1934, when he took the Carnegie Foundation post, Doctor Jessup was president of the State University of Iowa. Previous to that he was dean of the college of education there and also held the same position, earlier in his career, at the University of Indiana. . . .

The board of directors of the Lyon Metal Products, Incorporated, Aurora, Ill., has announced the appointment of H. B. Spackman as vice president in charge of sales and advertising. Mr. Spackman was formerly with the U. S. Gypsum Company in the steel products division. The sale and advertising of all Lyon products are under Mr. Spackman's direction.

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Side Glances—

STATE teachers' associations embrace by membership about three fourths of the nation's million teachers. The attitude of these associations on certain topics is significant to schoolmen and the public and to the future of American education.

Arthur H. Rice, director of publications and publicity of the Michigan Education Association, in a series of articles beginning next month will report to the readers of The NATION'S SCHOOLS the views of the various state associations on such subjects as school finance, federal aid, the building situation, structural reorganization, teacher welfare and other topics.

The biggest plank in the platform of many state associations is: "To obtain adequate, dependable and continuous revenue for public education." The first article will bring the answers from 43 state associations to four questions on the financing of schools.

FOR all the improved instruction and transportation that come to rural pupils through consolidation of schools, country boys and girls are short changed a little here and there. Athletics is an example. The busses leave promptly after the last class and even if one bus were held most of the fellows have chores to do at home and cannot stay for sports.

In the Tunkhannock Borough Public Schools in Pennsylvania, a noon-hour physical education program has been inaugurated. The out-of-town pupils love it; so much, in fact, that there is no more temptation to drop out of school after the ninth or tenth grade. Frank T. Dolbear, supervising principal, will describe this workable plan in the next issue.

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MARRIAGE is an institution that robs the school principal of some of his best women teachers. It isn't that he wants to prevent the marriages but that he dislikes losing a few good teachers every year; yet the chances are that there is a ruling forbidding the hiring of married women.

J. B. Geisel, principal of Central High School, Alpena, Mich., has a compromise plan that he thinks will answer public objections to the employment of married women teachers. Mr. Geisel would retain the teachers on a half-time basis at half pay. As half-time workers they will willingly carry a little more work than can reasonably be expected of the full-time teacher in half a day, so that should silence some of his critics. He will present his arguments in October.

ONE of the subjects this magazine has talked most about for the last eighteen months has been sight-saving. It has been developed from a new angle, that of the school plant. Natural lighting, artificial lighting, the use of paints and interior colors with a high reflection value, all have been stressed in a well-defined campaign.

Next in line comes an article on window shades. William P. Uhler Jr. of the New Jersey State Department of Public Instruction will tell you what is, in his opinion, the best type of school shade and will make suggestions as to the control of shades, the best of them being worthless unless they are properly used.

PARENTS in Western Springs, Ill., endorse the flexible progress group system in the primary grades as a change for the better by a majority of 14 to 1. Teachers unanimously approve the plan, which was adopted in September 1935.

Leonard B. Wheat, former superintendent of Western Springs schools and now head of the department of education of the Central Y.M.C.A. College, Chicago, will discuss the practical advantages of the system in the October number.

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LOOKING FORWARD

Building Prospects

JUST how far the secondary depression will be felt in the current operating budgets of the public schools is by no means certain. If there is a definite upturn in business during the fall it will be possible to carry on without severe reductions. A continuation of depression conditions will most certainly be felt in next year's operating budgets and will be certain to be most heavily felt in the marginal and submarginal school districts.

The brightest financial spot currently appears to be the building situation. It was assumed that the already delayed construction programs would suffer further setback as a result of the decline in business. The Congress closed with nothing accomplished directly in the way of increased federal aid to either operation or school plant construction. It did provide, however, for extensive federal stimulation of substantial public improvements through P.W.A.

Recent developments have made it apparent that the arguments of the educators for some means of relieving the jam in school plant construction, which grew out of the demand for the Schwellenbach Bill for school plant aid, have received recognition from the executive branch.

Instead of operating at a possible new low in plant replacement and extension, the early indications of P.W.A. and W.P.A. policy are that special recognition is being given to the schools. If the rate at which current federal grants and loans for schools are being made continues until November, it should provide for a total annual construction volume close to half a billion dollars, which is slightly above the average annual need.

This amount does not care for much of the accumulated demand but it will improve instructional conditions next year in many communities that are sadly in need of improved and extended facilities. It makes the entire educational picture look much brighter than had been expected.

Both the Public Works Administration and the Works Progress Administration are deserving of commendation not only for the early and clear recognition of school plant needs but also in the improved administration of the grants so that safer, better quality construction and equipment may be obtained, an improvement growing out of the experience of the last four years.

Cafeteria Size

THE rapid and somewhat unexpected growth of the public secondary school cafeteria within the last two decades has created a series of attendant problems in both administration and the physical plant. Conducted as a nonprofit service activity made necessary by the greater travel distances and the desired continuity of the secondary program, it now involves in large central and city secondary schools a specific space allocation as well as extensive investments in specialized equipment.

Administrator, educational designer and architect, to obtain efficiency in the use of expensive equipment and operating personnel, have stimulated the tendency in design to provide reasonably ample accommodations in single unit areas. Although extreme size is not essentially a problem in the typical school, yet certain large city high schools have been considering cafeterias in excess of 500 seating capacity.

Educational specialists in school cafeterias who believe not only in the health aspects from the standpoint of well-balanced, hygienically prepared food but also in the educational and social values of group eating are beginning to take issue with the proponents of "size for efficiency." Some of these specialists believe that no cafeteria should be designed for more than 500 occupants; others insist that space for 250 persons is a more valid size educationally. They also object to large barren rooms completely devoid of architectural treatment, efficient only in the sense that they permit rapid assimilation of food.

Objectors to huge size, environmental barrenness and mere mechanical efficiency have a strong basis for their stand. The school lunch period has definite educational values that cannot be neglected. It is necessary that proper facilities be provided to attain these objectives. The physical plant must adjust itself to these needs if it is to remain functional in character. If the social values accruing from an eating program cannot be attained in the typical current conception of a school cafeteria, then these practices are definitely sub-

ject to examination and review from the instructional standpoint. The educational designer and the capable school architect are definitely aware of this need.

There are definite solutions for this vexing problem. If existing rooms are too large, they might be modified by remodeling to provide areas for small group eating. In contemplated buildings it seems entirely possible to provide means whereby a group of smaller, more intimate rooms is provided. It would still be possible to obtain kitchen and operating efficiency at a relatively small extra outlay for rooms of rational size that possess architectural merit as well as space efficiency. It is much better administrative practice to organize for successive services and seatings than to attempt to care for peak loads in units that are too large. The school cafeteria presents a problem where inventiveness in designing should lead to a far better solution of the problem than is apparent in current tendencies.

A Wise Board

EVERY spring there are numerous changes in public school superintendencies. The executive either resigns to accept a better position or is removed for good or for insufficient reasons. The general condition is somewhat as follows: The old superintendent leaves at the end of June or July, depending upon the necessity for completing essential reports and for picking up loose ends. The new superintendent arrives in either July or August and finds a clean desk and a clean office. As a rule he is unacquainted with the community, its general policies and general conditions. At a time when study of community is urgently necessary, he is forced to plunge into the succeeding year's work without a chance for orientation. As a result of this inefficient procedure many mistakes are made, some of them serious enough to affect the tenure of the newly appointed executive before he has even made a valid start on the new work. The procedure is inefficient and expensive for both the schools and the people.

When a board of education wisely recognizes this problem and makes financial outlay to overcome the worst features of change, it is desirable not only to offer commendation for unusual social intelligence but also to describe the procedure.

When Dr. S. M. Brownell recently resigned the superintendency at Grosse Pointe, Michigan, to accept a professorship at Yale University, the board of education proceeded immediately to make intelligent provision for change. The superintendent was retained for an extra two months to complete all of the work in preparing for the next academic year. Budgetary and personnel problems were settled. He acted as adviser to the board of education in selecting his successor by canvassing the field and examining professionally the qualifications of a list of highly selected candidates. After the selection of a new executive had been made, he assisted in his successor's orientation.

As a result the Grosse Pointe schools will open and carry through the next year with a minimum of difficulty despite the change in executive. The procedure was not costly in direct outlay and is actually extremely economical and sensible in safeguarding the community against errors resulting from lack of understanding of local background by the incoming superintendent. The new executive starts his career with a minimum of handicaps. It seems so sane and worthwhile that the practice is sincerely recommended to other boards.

Air Conditioning

THERE was a time not many years ago when summer sessions in our colleges and universities were a minor part of the institutional program. Today the scene has changed and the summer session has become a major activity in higher education. The unusual growth in these classes is due to a number of reasons, but the learn-during-vacation movement among public school teachers that really got under way in the second decade of the century is responsible for most of the increased attendance. To meet these needs many of the higher institutions have arranged flexible programs for these summer visitors. There are two, four, six, eight and ten weeks' courses, designed to attract all types of individuals according to their needs and free time.

Extensive advertising campaigns start early in January of each year to attract summer visitors. Some institutions offer climate; others, social and particular urban advantages; still others, somewhat more conservative, just announce that a good education may be obtained at reasonable rates. These summer sessions are not for teachers and administrators only but in certain areas institutes and classes are now held for custodial and other specialized personnel.

While every effort is made by colleges and universities to attract summer students and while increasing curricular flexibility is provided, there is one area in which the student has been given little consideration. Despite the generally warm and humid weather that is typical of most of our states during July and August, practically no headway has been made in adjusting the physical plant to student needs. There is no evidence of air conditioning worthy of the name. The mere use of ventilating fans, pushing warm or washed air through the building, may decrease rather than add to the comfort of the classroom habitants. It requires considerable energy to study during sultry summer weather. Typical college classroom conditions do not tend to ease this strain.

Forward-looking institutional administration may find improvement in the physical plant another intelli-

gent method of adjusting to student needs and thus achieve an increase in enrollment as a by-product. Installation of comfort-producing equipment also might overcome the superior advantages certain institutions, strategically located with respect to mild and invigorating climate, now have. The pioneer institutions in air conditioning certainly are going to be popular with summer session students. Classroom comfort is something that summer school students have a right to demand.

Let's Be Consistent

THERE has been much belaboring of the report of the President's Advisory Committee on Education in certain areas during the last few months. These disagreements have drawn good news positions in conservative papers and a surprising amount of editorial comment. The general gist of the criticisms has been that the enactment of the report would result in undesirable federal domination of public education. This attitude is a matter of opinion. If the recommendations of the report and the principles upon which these recommendations were built could be translated legally in actual spirit and scope, aid without control might be possible. Unfortunately this complete translation does not seem a practical or a political possibility. To this extent there may be agreement with the objectors.

The Harrison-Thomas Bill, sponsored by the National Education Association, claims to have translated the report into proposed legislation. As stated in the July issue, this assertion cannot be maintained in fact. The Harrison-Thomas Bill is dangerous and should not be passed. However, there seems to be a strange inconsistency in the attitude of those who violently oppose the report, merely the survey phase of the problem, yet raise no objection to the N.E.A. sponsored bill, wherein the real danger lies. It seems that a normal consistency in attitude would include not only the committee report in its condemnation but the Harrison-Thomas Bill as well. The report is harmless; the proposed bill is exceedingly dangerous.

Is it possible that emphasis on the report to the neglect of the bill is a smoke screen? At any rate these attacks appear to be missing the main objective which should be the quick death in committee of the Harrison-Thomas Bill.

Teacher Heroines

THE exceptional effort of teachers throughout the country to alleviate some of the worst effects of the depresison upon the children has been commented upon before. The teachers themselves have merely accepted these social contributions as part of a normal obligation.

In the daily routine of duty teachers frequently perform outstanding feats of courage and heroism in which, conforming to the finest ideals of professional responsibility, they completely forget self in terms of much larger objectives. Sometimes they receive due public acclaim and specific recognition. More frequently these fine achievements are merely accepted as high expressions of ordinary obligations.

A recent instance deserves more emphasis than mere recording. Virginia Sappington was an 18 year old teacher in charge of a rural school in Piety Hill County, Kansas. Last March she noticed the rapid approach of a tornado and ordered the children out of the endangered building to a protective ditch less than a quarter of a mile distant. Hardly had they thrown themselves face downward in this depression before the tornado struck and completely demolished the building. Not one of the twenty-one children was harmed. Her intuition and quick thinking prevented serious disaster.

At its July meeting the National Education Association recognized this unusual act by presenting her with a life membership. It was an unusually fine and graceful gesture. It did not enhance Virginia Sappington's act of great daring but it did indicate that the teaching profession is becoming conscious of the need for more than casual recognition of unusual service of its members.

Recruit Wisely

MEMBERSHIP recruitment programs for state and national professional organizations jump to full action with the opening of the school year. In consideration of these plans for larger memberships in our teacher organizations it is well to bear in mind that no profession has ever been built through pressure tactics. The development of teaching into a profession depends upon the willingness of teachers and administrators to recognize their obligations toward the people, to recognize the need for standards and for improvement of education as a paramount need, to develop a rational ethic in personal and group relationships, and to band together and, if necessary, even to make real sacrifice to achieve these professional objectives.

A realization of values such as these and a sense of responsibility cannot grow out of pressure membership campaigns or forced relationships. It grows, instead, out of appreciation and understanding. The development of teaching as a profession must be one of slow growth. It will proceed faster through an intelligent education of teachers to their obligations than through mandatory affiliation and forced membership. Let there be an absence of administrative coercion.

The Editor

Ten Year Plan for Libraries

MIRIAM HERRON

TO SEE which way the wind is blowing for the school library, librarians must throw into the air several straws—the straws of society, the straws of education, the straws of the public library and the straws depicting changes in youth itself. Throwing these straws into the wind, I have come to a few conclusions about the school library in the next decade.

In contrast to the present, there must be a program of comprehensive planning. The librarian should be a member of the curriculum planning committee. If she is not invited to work with the group, she might tactfully volunteer her services because, from the nature of her work with the materials of instruction, she should know in advance about changes in methods and courses.

In planning the place of the library in the scheme of a particular school, the librarian should have the aid of a faculty committee. Pupils also should have a share in the planning. A library board or a committee of

Left: The school library should provide the pupil with books on his hobbies and a place to share the results of his work with friends and classmates.

Below: Pupils and teacher in a working companionship with library materials as tools. Right: A cooperative library system brings the books to rural children.

the student council will voice pupils' viewpoints and will keep the library a democratic part of the school.

Local planning will fit in with the program of the larger school library units—the region, the state and the national organizations.

The most obvious change in secondary education is the increasing high school enrollment resulting from nonabsorption of youth in industry. We are now receiving in our high schools the last 35 per cent of young people of secondary school age, those formerly thought almost uneducable. They are usually physically active and are impatient with books, preferring to "live" rather than to "learn."

The junior college movement is spreading and two years beyond the twelfth grade may be added to the present high school or there may be a reorganization of the whole system. The school library may find itself catering to the lower secondary school or to eleventh to fourteenth grade youth.

The secondary school will take on adult pupils as well. Night classes and leisure time classes will depend on the library for supplementing and continuing adult education. School libraries will adapt their technics to both types of pupils.

Another implication for the library is the increasing emphasis on the individual and the new respect for human personality. A more complete record will be kept by the school of the individual pupil and of incidents in his school life as observed by his teachers. Into such a file of records will go his reading record.

Personality ratings of the future should be as reliable as intelligence ratings today. The school librarian will be consulted in making out the personality trait ratings because her slant on some pupil problems differs from that of the classroom teacher. The librarian must learn to watch more closely for maladjusted pupils and to report their cases to the proper authorities. Bibliotherapy has been used by librarians in the past and will be more useful in the future when its value is known.

Less and less will the teacher or the librarian be an aloof, dictatorial taskmaster. To the school chess champion, the librarian, who reads her student newspaper, will recommend "Strategy and Tactics in Chess." To the girl who exhibited her puppy in the dog show but who has evinced not the slightest interest in reading, the librarian will suggest "The Practical Puppy Book" and later "Flush" and "Two Poets and a Dog."

Individual study will be emphasized within the coming decade. There will be more remedial work done with small groups where need of special coaching is indicated. The scientific knowledge now available in the teaching of reading, for instance, will be applied to pupils whose whole careers formerly were handicapped by poor reading ability. Group intelligence tests cannot be relied on for mentality rating because they require reading and the person with reading difficulties rates low. Remedial classes in reading uncover more and more power in children previously believed to be dull. The library always has done its best work individually.

Although expensive in time and money, the library of the future must expect to cater to the individual interests of pupils, both in school and out. It may have to buy or borrow books for the boy who is interested in making a deep-sea diving helmet, even though he is one among five hundred. The helpful suggestions of the school librarian may lead to the development of another Ellsberg or Beebe.

In the future, human relationships will be taught in clubs and classes. Long Beach, Calif., now has a course in school and community problems, designed to help pupils become successful class and student body leaders. There will be units on family relationships in the home economics classes. The library can supply stories and biographies which present family life and right attitudes in a readable style, such books as "Log Cabin Lady," "You Make Your Own Luck," the perennial "Jane Eyre" and "Mountain Girl Comes Home."

Young folk have always been interested in knowing how to behave in the strange adult world they are about to enter. Desire for self-improvement is keen. For the use of deans, home economics classes and certain clubs, as well as the individual borrower, the libraries will stock more of such books as "Your Carriage, Madam," "Personality Preferred," "What Your Voice Reveals," "The Correct Thing" and "Behave Yourself." Such are the textbooks in a real "charm school."

Naturally these changes will call for radical reorganization of administration, curriculum, materials, methods and staff.

There also will be changes in the design and equipment of school libraries. A friendly fire will burn in the fireplace. Color will appear in draperies, posters, furniture, book ends and in the books themselves.

One other thing that appears to be a definite trend is the taking of nu-

Apprentices in the trades are served.

merous books into the classroom. The day of one textbook is past. Classrooms will be equipped with bookshelves and tables, instead of desks and chairs in a row. Since much of the studying will be done in the classroom, there will be no need for the old-fashioned study hall. There will still be a need for a central reading room, with a stack room adjoining where the classroom collections will be shelved and exchanged. New equipment in the form of trucks or boxes with handles will need to be developed for the transportation of teaching aids between classroom and library.

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Since there will be individual and group guidance taking place in the central library, more small conference rooms adjoining the reading room will be needed. Sometimes it will be advisable to have departmental conference rooms or alcoves where an instructor from the department can be present at all times to guide the pupils' reference work in the book materials of that department.

In the reading room or near it will be space for the exhibits and museum materials. The library display cases also provide a place to show the results of group projects and their connection with books. This informal recognition by teachers and fellow pupils should largely take the place of awards and artificial recognition. As a part of the library suite, there will need to be a room for using slides, films and other visual aids, and perhaps a "listening room," for radio programs and oral material, such as the talking book.

Since the library of the future will serve as a clearing house for the visual and concrete materials more adapted to the type of pupil who does not respond to abstract education, storage space will be needed for mounted pictures, exhibit articles, models, films and filmed books. The need for a central city or regional headquarters for visual material to avoid unnecessary duplication of expensive material is indicated.

Service to night classes or "staggered" sessions and year round school terms will call for longer hours and more librarians to cover the schedule. In some schools, the present increased school population has necessitated multiple sessions with different pupils in school mornings than are present in the afternoons. Sometimes, owing to overcrowding or to the problem of getting pupils delivered at home by the school bus,

1—The school library caters to individual interests. 2—These books lure the picture reader. 3—High school instructor and pupils work out a current events project in close cooperation.

Color and informality have been invited to stay in the school library.

not much time is left for library use after the regular classes are over. Provision will need to be made within the school day for library visitation.

With the increased in-school use of books, many of which are not charged because they are used in the reading room itself, librarians may find that home circulation of books will be less.

There will need to be frequent duplication of books in classroom collections. There must be material at various levels for all subjects to fit the differentiated instruction that will be given. We shall select books largely for their readability. More books will need to be developed for new types of students—books containing adult ideas but capable of being read by pupils with low I.Q's. Especially for the social sciences will such books be essential. These books will make frequent use of pictures, graphs and charts.

Even textbooks will be in new forms. Simple technical books will be needed in quantities. For recreational reading books for our new type of pupils, we shall need to take special care to make them into the stepping stones we hope them to be and not merely a collection of "westerns" or "detectives." There will be many magazines in our library to lure the picture readers and the pamphlet collection will take on increased significance because of the demand for simplicity and brevity. The whole library collection will need to be culled for unattractive, pedantic books, so that the young reader will be exposed only to the choice samples of the bookmaker's art.

In the curriculum built on the needs of the great mass of youth who will not go to college will be new and strange subjects. The courses will tend to have immediate values rather than deferred benefits. The book stock of the library must be added to as these new courses develop. There will be more courses in modern problems, in personality development, in radio and moving picture appreciation, in housing, in homemaking for boys, in automobile driving, in consumer education.

Combinations of several subjects may be made to study life situations as they are. As in Los Angeles, English and social science may be combined into one course called social living. Or the art, literature and history of a period may be studied together, if the teacher so desires. There will be more freedom in selecting and in arranging the content of courses than heretofore. Such integration demands that the library be the center of all interest because it is the source of the extra-textual material so necessary in this type of teaching.

The librarian must teach all pupils to use books as tools. The library must be so organized that pupils may learn to help themselves.

Methods of teaching the use of the library are changing. More and more, librarians are recommending the integration of library instruction with classroom subjects. At the proper time, the secretarial class learns to use atlases, the "World Almanac" and business encyclopedias through problems based on those books. The economic geography class learns to use the vertical file and the "Readers' Guide" in time to write a report on the products of South America.

When the class is ready to take up a research unit, the librarian is called

into conference. Library materials are introduced and explicit directions for using the tools are given. The librarian is consulted by both pupils and teacher and definite questions are raised and answered.

In such an arrangement, library instruction assumes its rightful place as a means to an end and not an unrelated series of meaningless tasks.

Guidance and individual counseling loom large in the future of our higher schools. Guidance is no longer based on preparation for vocations alone but takes in such issues as participation in extracurricular activities, use of leisure time on and off the campus, personality difficulties, health and morals. Guidance must be brought into every course in the curriculum. A good guidance library covering all phases is necessary both for the use of counselors and for pupils.

With the introduction of more library usage in the elementary schools, mass instruction in library usage in the higher schools becomes less important than individual guidance and differentiated instruction in connection with the problems that arise in the pupils' daily use of the library. Brief printed or mimeographed aids describing a single tool can be handed to the pupil at the psychologic moment with more assurance of their being heeded than the longer handbooks distributed in masses to new pupils.

Better Cooperation With Colleges

In the future, high school cooperation with colleges and universities will be more evident. There will be more attention given to selecting those who will go to college and in orienting them before and after their enrollment. The high schools will follow closely the successes and failures of former pupils. Colleges say that high school graduates who are accustomed to use the library are six months ahead of those who have not learned to use book tools. There will be more attention given to teaching the methods of study, advanced library usage and simple research technics to college preparatory seniors. More emphasis will also be placed on the formation of a personal library and plans for a reading program that will last through life.

The library, as well as other school departments, will make better use of its community than at present. Local industries can help the school library by providing exhibit materials, models and pamphlets for classes studying the home city. The school librarian of the future will understand the influence of the moving picture house and the home radio and will use their influence to stimulate reading. Mabel Williams, superintendent of work with schools, New York Public Library, says that the influence of films on reading is most noticeable among the pupils at vocational and industrial high schools. These young people are nonreaders ordinarily, although their interest in motion pictures can be led to an interest in books from which films have been made. Through these films, they have become conscious of books and reading as a pleasurable experience.

The successful experience of Chicago with emergency instruction over the radio may lead to a wider use of the air waves for education, with perhaps listening groups and discussion groups who have been furnished lists of readings to correlate with the broadcasts. The school library can help publicize the better news broadcasts, comments and dramatizations. Certain advance information and study outlines are available on such programs as those of the U. S. Office of Education, the American Medical Association and America's Town Meeting of the Air. The library can supplement this material with bibliographies.

The local P.-T.A. can be useful to the school library and an annual "library night" will give an opportunity to talk over the problem of children's reading that will be welcomed by many parents. This will permit home contacts which the librarian cannot ordinarily make as easily as the classroom teacher. A book club for parents might well be formed by the school librarian.

A closer tie-up with the public library is indicated to ensure the effective use of books by our pupils when they become adults. Many city libraries are giving the space formerly devoted to a children's room to a young people's department, as the number of children who visit a downtown library is negligible.

The school librarian will work more closely with other young people's organizations—the Scouts, 4-H, the Y and other clubs. She should be available for book talks when invited to appear before these organizations. Principals should encourage their librarians to make such contacts with the community, because educational advance depends upon an understanding and sympathetic public.

The final straw in the wind is youth itself. While many older people and many organizations are interested in the fate of youth, the young people themselves must help in working out a program. Although the problems of youth are old, their setting is new. The American plan is to face the problems squarely. Some of our youth must be trained for leadership but the majority need to be trained in "followship." Young people, generally, must be made aware of the wide range of conditions under which men live.

Toward a Critical Attitude

At the same time, youth needs to know how difficult it is to get at the truth in the social field. He should have at hand a variety of contemporary accounts of current happenings and be allowed to compare various points of view critically. He should be given a set of yardsticks by which current events can be interpreted. The only sure guide is an adequate body of information and a critical attitude. One available yardstick is the *Monthly Letter* of the new Institute for Propaganda Analysis.

The school library, as a cooperative enterprise which exists for the greatest good of the greatest number, has an opportunity to give to the pupils who work on its staff and to the school at large a demonstration of democracy in successful operation. It is a place of fair play and good citizenship, where the pupil has a chance to develop only the best social and personal habits. However, it must eagerly adapt itself to changes as they come and it must be ready to propose plans for making adjustments between where we are and where we want to go.

Having Ears, They Hear Not

W. S. OWNSBY

With the assistance of Dr. H. T. Manuel, professor of educational psychology at the University of Texas, the author has surveyed the hearing acuity of pupils in the school system of Cleburne, Tex., where he is assistant principal in the high school

SIX per cent of school children are handicapped by defective hearing, 1 per cent so seriously as to need training in lip reading. These are the findings of a survey of hearing acuity in one school system.

The survey included pupils and teachers in grades 2 to 11, inclusive, of the public schools of Cleburne, Tex.

Three phases of the study will be reported here: (1) the extent and degree of auditory defect among pupils and teachers, (2) the practical results growing out of the testing and (3) some of the main characteristics of pupils suffering from defective hearing.

During the months of November and December, every child in the Cleburne public schools, grades 2 to 11, inclusive, was tested for his auditory acuity by means of an audiometer lent by the division of extension of the University of Texas. The pupils were tested in groups containing a maximum number of 40. If the original test of a pupil showed that he had defective hearing, he was carefully retested to be certain that no mistake had been made and that he was really hard of hearing.

The testing was done by teachers after a preliminary period of careful training. Among the things stressed in the training of the teachers for the testing were the following: (1) giving the pupils the correct instructions so that each individual test would contain, when completed, all of the correct, identifying information, such as name, age and grade; (2) the necessity of absolute quiet in the room during the test proper; (3) the requirement that each pupil have an extra sharpened pencil ready for use in case of an accident with the other pencil; (4) the desirability of having the testing room located in a part of the building that was completely removed from disturbing influences; (5) the need of conducting the test so that no one cheated, copied or created a disturbance; (6) the recommendation that a slight rest of two or three minutes be given between the tests for the right and for the left ear so that the results for the left ear would not be marred by fatigue; (7) the imperative demand that the ear pieces be properly adjusted before beginning the tests; (8) the absolute necessity that each box containing eight sets of ear pieces and connections be properly plugged to the phonograph box; (9) the changing of the needles frequently; (10) the disinfecting of ear pieces, and (11) the use of reliable pupils as monitors to dispatch the tests.

The testing program included 2468 white pupils, 60 white teachers (through a misunderstanding 30 white teachers were not tested), 110 Negro pupils and 7 Negro teachers. Retests were made of 253 white boys, 268 white girls, 3 Negro boys and 7 Negro girls.

Percentages of pupils found to be hard of hearing (having a loss of at least six sensation units in one or both ears) are as follows:

White boys, 6.5 per cent; white girls, 6.2 per cent; white boys and girls, 6.32 per cent; Negro boys, 2.63 per cent; Negro girls, 4.17 per cent; Negro boys and girls, 3.64 per cent; white teachers, 23.3 per cent; Negro teachers, 28.56 per cent; all teachers, 23.88 per cent.

As in other similar studies a higher per cent of white boys than white girls was found to have defective hearing. The fifth grade had the excessively high per cent of 12.1; the third grade had the very low per cent of 0.60. Thirty-two, or 1.24 per cent, of the pupils tested were so handicapped (having a loss of at least 12 sensation units in both ears) as to need lip reading.

In the actual school situation the practical results of a study like this are assuredly the ones that should be stressed. Each of the 2578 pupils tested and his parents were notified of the results of his hearing test. This written notification was accompanied by a simple explanation of the results. This was done in accordance with the principle that the pupil and his parents always should be notified promptly and in a manner that is understandable to them as soon as the pupil is found to be deaf or partially deaf.

Experience in this study emphasizes three important rules for making results of hearing tests useful:

1. All who in any capacity as teachers or supervisors come into contact with the pupil who is hard of hearing should be given a written record in practically permanent form. This should show the exact extent to which the child is deficient.

2. Other records should be made and placed in the hands of teachers, bearing an unmistakable entry to remind the teachers of the constant need of the hard-of-hearing child for special treatment and consideration.

3. Pupils found to be hard of hearing should be placed in strategic positions in homerooms and in recitation rooms. Seventy-seven per cent of the pupils in the Cleburne public schools who were found to be hard of hearing were reseated after this survey. At the other extreme were 4.6 per cent who had very acute hearing and who could hear with

ease and pleasure in the most disadvantageous positions and under trying circumstances.

The study has revealed or emphasized the following characteristics of the hard of hearing:

1. The hard of hearing are seriously handicapped in school work.
2. They are often erroneously called stupid.
3. Lack of proper auditory acuity is often regarded lightly by parents. The study revealed that only 30 families, representing 36.6 per cent of the hard-of-hearing children, were really interested in making use of the information given them.
4. A high per cent of the hard of hearing is found in families whose economic status is low. No child in the family of a minister, physician, attorney or teacher was found to be hard of hearing. The economic status of only 42 per cent of the families of the hard of hearing was fair or better, while 58 per cent of the families of the hard of hearing were poor or very poor, 33 per cent being very poor.

It is also a fact that many of the families classified as "fair" in economic status will not spend money for the services of a specialist for hard-of-hearing children unless the type of deafness is of such a nature as to cause the child recurring pain or discomfort.

5. Partial deafness is generally unknown to the pupil and to others with whom he associates. There are 28 teachers in the high school. Thirty-seven pupils in the high school out of a total of 773 were found in the survey to be hard of hearing. Three teachers did not know that any pupil was hard of hearing; 14 teachers knew of 2 pupils; 7 knew of 3 pupils, and 1 teacher, before the survey, knew of 4 pupils in the high school who were hard of hearing. Twenty-eight of the 37 pupils who were found to be hard of hearing did not themselves know of their condition.

As a result of this study it is recommended that: (1) each pupil during his stay in the public schools be tested for his auditory acuity at regular intervals of three years; (2) information concerning auditory acuity, as well as I.Q. and scholastic record in college, be made a definite factor in the employment of teachers, and (3) definite study and investigation be given to the vocational implications of auditory acuity.

When one considers the importance of hearing, it is really amazing that so simple and so effective a device as the audiometer is not universally used and that the testing of hearing is not a routine procedure with all school children.

The information gained in this study has accomplished two things: it has improved decidedly the instruction of the hard-of-hearing pupil and it has made more effective the vocational guidance of the high school pupil.

It is also claimed that if information concerning the auditory acuity of applicants for teaching positions is in the hands of the school board, persons who are decidedly handicapped in regard to hearing will be kept out of the schoolrooms as teachers, a useful measure.

Panacea for Delinquency

CAMILLE KELLEY

THE panacea for "all the ills that flesh is heir to" is education. The word "educate" means "to draw forth" and not to drive in. The unfoldment of youth is a vital process.

The deliberately delinquent boy or girl is rare where analysis shows a normal mind. Youth is frivolous, not corrupt; adventurous, not vulgarly daring, and needs intelligent guidance. Youth is in search of happiness.

Just where is the line drawn between the violent outbursts of normal youth and the delinquent who is dangerous to society? When we consider background, inheritance, environment, neglect, economic strain, dissipation, mental and physical cruelty, inadequate social facilities and limited educational opportunities as the curves and danger spots on youth's highway, we wonder whether a juvenile delinquent sins against society or whether society sins against the juvenile.

It is important that the delinquent be classified according to talent. When we train children to do the things they can do well, when we educate them along the line of their capacity and talent, they express joy and satisfaction and fit into society's requirements.

In the behavior world much depends on how the community handles or cares for the mentally ill, feebleminded, crippled and lawless.

The type of institutions, both educational and protective, determines to a large degree the amount of security and happiness enjoyed by the normal citizen. It is lack of citizenship that jeopardizes our safety more than crime.

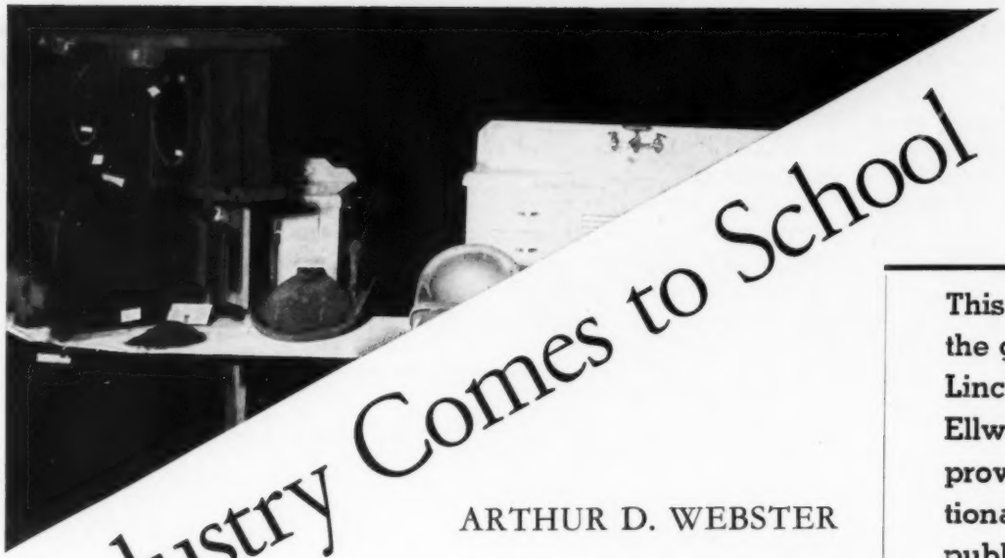
A juvenile court is a social clinic providing mental and physical examinations and is as important as the classroom.

Modern parents, who have lost none of the ideals of yesterday and have not relinquished their controls, represent the first line of defense against juvenile delinquency.

Censure is cruel and I do not believe that there is much healing in it. It may be a safety valve for the person using it, but pounding people down has little power toward building them up.

Every generation has its peeve. Yesterday we blamed dime novels; today we blame modern influences, the movies, radio and automobiles. I do not concur in the condemnation. Diagnosis without suggested remedy or prescribed treatment is of little value.

Education with its natural social results is the answer. School systems, where adequate care and attention are given to all types of growing children; well paid and well chosen teachers, probation officers and modern juvenile courts where mental and physical examinations are made; the right kind of training and reform institutions; protective social legislation, all of these combine to make a healthier atmosphere for the growing child and to prevent delinquency.



Industry Comes to School

ARTHUR D. WEBSTER

This project, directed by the guidance counselor, Lincoln High School, Ellwood City, Pa., has proved to be of vocational education and of public relations value

LINCOLN HIGH SCHOOL, a six year secondary school of some 1900 pupils, is located in the populous industrial region of western Pennsylvania of which Ellwood City is an integral part.

Its pupils are largely children of mill workers employed in every industry of the town. In spite of their apparent close relationship with industrial conditions in the community, we were of the opinion that the pupils knew almost nothing about the economic activity of the town as a whole. It appeared that they were acquainted only with the industries in which members of their immediate families were engaged. This assumption was found to be justified as our program developed.

The plan for an "Ellwood City Industries Week" was devised by the guidance department of the high school for the following purposes:

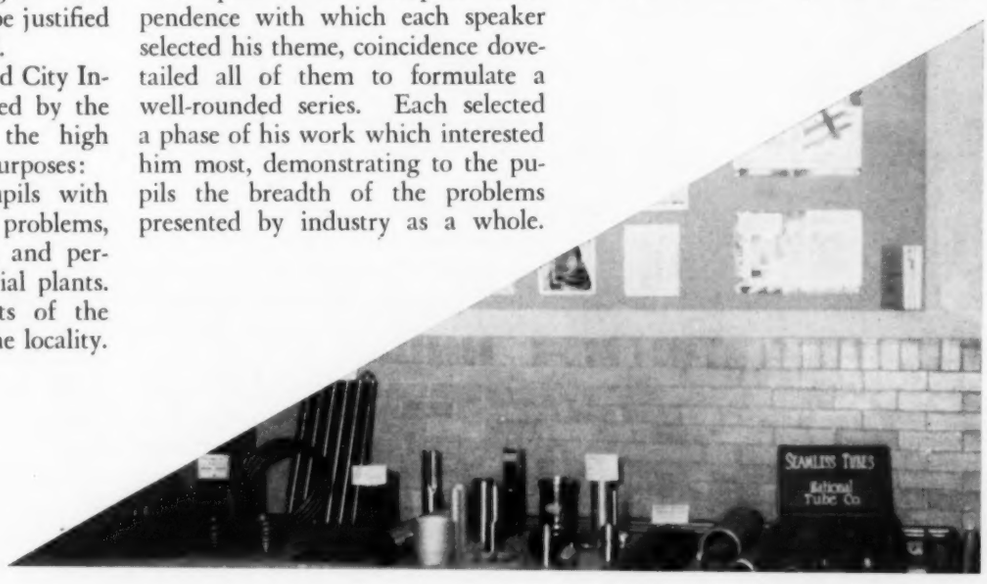
1. To acquaint the pupils with some of the features, problems, makeup, history, products and personnel of the local industrial plants.
2. To integrate interests of the schools and industries of the locality.
3. To acquaint industrial leaders of the community with the schools and school conditions.
4. To stimulate the interest of the community in industrial education.
5. To promote the ideals of the children by providing personal contact with men who have achieved success in their chosen fields and with the products which they manufacture.

Each day at the beginning of the afternoon session during the Industries Week, the president, or other responsible official of one of the local plants, addressed the student body of the entire school over the recently installed homeroom communication system. This talk concerned some phase of the industry in which his company was engaged; the speaker chose his own subject.

In spite of the complete independence with which each speaker selected his theme, coincidence dovetailed all of them to formulate a well-rounded series. Each selected a phase of his work which interested him most, demonstrating to the pupils the breadth of the problems presented by industry as a whole.

For example, the president of the Mathews Conveyor Company, Monday's speaker, developed for his listeners a history of the company while on Tuesday, the president of Mrs. Smith's Noodle Company pointed out some of the administrative problems faced by the business executive. On Wednesday, a representative of the Beaver Enameling Company, while referring specifically to his own plant, emphasized the importance of possessing a proper mental attitude toward one's job and how it could be developed in the school. Then, on Friday, the president of the Ellwood Company traced the development of the raw material to the finished product.

While each speaker referred primarily to his own plant, the infor-



Displays including sanitary ware and steel tubing were placed in a conspicuous place in the school and changed daily.

mation given was sufficiently diversified to hold the attention of the pupils.

Additional interest was fostered by inviting the pupils to address written questions to the speaker in advance of his speech, to be answered during the course of his address. In this way greater personal contact was made between the industrialists and the pupil because the latter was made to feel that the speaker was addressing him particularly. Many queries were proposed and answered in this way.

Each day in the main hallway the products of the company which the speaker of the day represented were displayed. Each pupil was permitted ample time to visit these exhibits and to inspect them closely.

These displays also were used by the science teachers for demonstrating certain theories and principles to their pupils, one type of educational value not anticipated when the program was begun. One manufacturer lent for a full day an engineer to explain to pupils the process of manufacture, the physical makeup and the uses of products on display.

Such a venture depends to a large extent upon publicity. Enthusiasm of the pupils must be contagious enough to reach into the home. The cooperation of the local newspaper was enlisted. Besides a series of advance stories, the speeches of the industrial leaders were printed verbatim throughout the week and published along with a description of the display each day.

The effect was only natural. Townspeople manifested a desire to have one of the displays exhibited at some public place. This request was complied with readily when a large centrally located department store offered the use of one of its display windows at the conclusion of the program.

The industries of the community, at least those which took part in "Ellwood City Industries Week," have left an impression upon the minds of our pupils. The factories are now more than a mere group of buildings and clouds of billowing smoke; they are places of reality in which products are actually manufactured and sent all over the earth. They are the medium of Ellwood City's contact with the whole world.

Likewise, the industries have a new conception of the school. The school and industry have been reintroduced by this vocational education program.

Another result of this newly acquired relationship is the change in attitude of both pupils and industry toward the school's placement service. This feature of the guidance organization has been in operation for some time, but neither the pupils nor the employers had taken advantage of its facilities to any extent. It was regarded more or less as a harmless idea indulged in by impractical theorists. Each group is now aware of the integrating force of such an agency and has expressed interest in it. Both groups are thus prompted to avail themselves of its facilities.

Cultivating Safety Habits

CHARLES B. GLENN

THAT an important place is given to the subject of safety education in the schools indicates a recognition of the seriousness of the situation as well as faith in the school to assist in remedying it.

Clearly the mandate to the schools is to make safety instruction an integral part of the present day school curriculum. This does not mean necessarily that separate courses in safety should be given in our schools, although this may be done, but it does mean that well thought out plans should be put into operation to make the pupils safety-minded.

This can best be done by creating in the schools an atmosphere of safety-mindedness and by cultivating through practice the habits of safety. In the course of study itself such subjects as civics, history, geography, science, home economics and manual arts readily serve as carriers for correlation of a wealth of valuable safety material.

In the high school program, the most certain preventives of carelessness are accurate knowledge and the will and habit of caution. The knowledge that the gun is loaded and of what causes it to go off, along with the habit of caution in handling it, is the surest safeguard against being shot or of shooting others accidentally.

The superintendent should emphasize the prevention of various types of accidents that are common particularly to children of high school age. This is the period when children generally are learning to swim, when they have their first experience in camping, hunting, fishing, football and automobile driving. It is the age at which the youth begins to stand alone and face some of the real problems of his environment.

We are not entirely without encouragement in the results of the efforts that have been made to teach safety in the schools.

An interesting deduction from recent statistical data is that the fatality rate of children resulting from traffic accidents has decreased in spite of the fact that the adult rate has increased. The most effective work and the most encouraging results are not in the high schools, but among the younger pupils in elementary schools.

From 1922 to 1933 the traffic accident death rate for children in the 5 to 9 year group decreased 25 per cent. In the same period the traffic accident death rate for children in the 10 to 14 year group increased 3 per cent and in the 15 to 19 year group the traffic accident death rate increased 130 per cent.

Clearly greater thought and more careful planning must be given to the high school programs.

The success of safety teaching in the elementary schools offers a challenge to secondary school administrators. Superintendents should accept it and endeavor to plan safety courses especially applicable to high school pupils. There are reasons to believe that, because of the superior intelligence of the group, results in this field may be even more encouraging than in the elementary schools.

Public Relations Are Vital

M. L. GOETTING

Public recognition of dividends on school investments in terms of value received is the best preparation for interpreting educational needs to the public, a professor of education at Baylor advises

THE administration of education in a democracy must be vitally concerned with the attitude of the public toward the school and toward education in general. A sound public relations program is indispensable for private business and especially for public utilities. Every alert school administrator recognizes that the value of public interest and the good will of the community are as essential for education as they are for business and industry.

In its institutional development education has evolved as a public function both from the standpoint of control and from the standpoint of support. Schools have attained their present positions of importance in response to the designs of public necessity. Further attainments in the future are contingent upon the visions and desires of an enlightened public with respect to the unrealized educational values.

The form that educational institutions continue to assume and the extent to which they contribute their services are directly related to the willingness of the public to invest in them. In the future as in the past, schools must be built and operated within the limits of public support—morally, financially and intellectually.

The scope of education, either in terms of the number of people affected or in terms of the money involved, exceeds every other business enterprise of the state. Whether prompted by philanthropy or by necessity, appropriations for education may be interpreted as an investment. Investment as a concept implies some form of returns as a consideration.

Compensating returns on educational institutions may be contrasted with those on business investments in two respects. In the first place, education is considered a sacred obligation on which dividends are payable only from one generation to another rather than at frequent intervals. In the second place, dividends must be expected in the form of services rather than as profit in the same terms as the investment. Schools are transforming institutions where values of one type are converted into a more desirable type.

The concern over dividends is encouraged not merely because of the size of the investment in education but also because of the services contemplated by the school. While an exact accounting would demand a detailed analysis of outcomes, it must suffice to note that the anticipated services of education lie in the realm of personal and social dividends.

One of the functions of modern school administration is public relations. The most desirable connotation of this function implies maintaining the good will of the public and assisting it in interpreting the school in the most significant and worth while terms. Educational administration must sponsor desirable educational objectives and then assure itself that a knowledge of their achievement is an element of public consciousness. Public recognition of dividends on school investments in terms of value received is the best preparation for interpreting educational needs to the public.

Several circumstances combine to make the publicity function a necessary and particularly vital one today. Growing complexity in organization and administration, and specialization of functions have removed many details of the school from the immediate concern of the public at large. The growth of the social order at an accelerated rate necessitates a constant reinterpretation of education by professional leaders and, needless to say, by the lay public.

The time and energy of the people in keeping informed on current developments must be shared by a growing number of institutions and enterprises. With other institutions and agencies competing with the school, it is obvious that greater effort and skill must be employed to be assured that essential information concerning education reaches the public. We thus appreciate the difficulties of the public mind, that with a diminishing amount of time it must keep informed on a rapidly changing institution with many phases of which its connections are growing more remote.

A school may be interpreted by the public: (1) through its plant, (2) through its personnel, (3) through its reports and (4) through its product. Since the average citizen has the opportunity to utilize all of these mediums in the interpretation of his school, their significance justifies the attempt on the part of school administrators to give each approach its maximum effectiveness.

The school plant reflects the cause of education in every community. It is a silent monument to the educational sentiments which the community holds and to the ideals which it fosters. In its architectural design, its artistic beauty, its attractive management, the school is a visual emblem.

Every school employe is an ambassador to the cause of education in the community. Teachers and administrators have long since enjoyed a local prestige of recognized importance. With the popular conception that they are expected somehow to embody all the ideals and characteristics they attempt to inculcate, they provide a unique opportunity through which the community may interpret the school program. Every

demonstration whether by word or action throughout their many community contacts molds public opinion of education.

The potency of any school report, verbal or written, as a basis for interpreting the school must be recognized. The word-of-mouth comments of board members, superintendent, principals, teachers and pupils, as well as school publications, news columns and official reports, all suggest the many channels for various types of educational information.

Numerous items are available for school news and reports and selection is prompted by a diversity of motives. Some items are of interest to limited groups in the community, some have a seasonal interest and some are of value because they inform the community of changes or important features of the school program.

While the effectiveness of the various mediums for interpreting the school may vary with time and event, the central feature of information about the school should be the contributions that the school makes toward its basic objectives.

As a fundamental idea, any institution should be interpreted through its product. It goes without saying that the product of the school must be expressed in terms of pupil growth, success and achievement. The ease with which this idea may be perverted bears remembrance. Although there may seem to be a disposition to take pupil accomplishment for granted, the interest of parents in this type of information has surpassed their interest in all other types of school news.

If the relations of school and public have a permanent effectiveness they must be established on a perspective of intelligent understanding and mutual confidence. Both the school and the public must recognize the true province of education and the worthwhileness of its results. This gives a basis for interpreting the school by the public and the giving of information by the school. Such a policy places a premium upon pupil success, while information on such topics as school costs, salaries, budgets, administrative procedures and extracurricular activities has an added significance if interpreted in the light of their contribution to pupil progress and recognized educational results.

Such principles give the public relations program an element of desirable continuity. Interest in pupil progress and success being perennial, the necessity for the sporadic fund raising type of publicity campaign is reduced. With proper consciousness of all factors of pupil achievement the recognition of school needs appears gradually and with a sane emphasis.

The necessity for financial appropriations requires that education be reevaluated periodically with more or less regularity. Changing educational needs, together with a fluctuating monetary unit, preclude a permanent appropriation with any degree of exactness. Conditions demanding increased appropriations include an expansion of services to accommodate increased attendance, a horizontal expansion in the way of a broadened program, a vertical expansion to include higher or lower grades and a decline in the value of the dollar. Times of depression and a deflated dollar likewise encourage an adjustment in educational appropriations. When reevaluations are necessary, in what terms shall they be made?

The question as to whether education should be interpreted and evaluated on the basis of results peculiar to itself or on a relative basis in comparison with other public services is a fundamental one. The competition of other public services with education becomes especially noticeable at times when expansions are contemplated or when retrenchments seem inevitable.

Education during the present depression has had to meet such competition. Unfortunately, it seemed impossible to establish an irreducible minimum educational standard. In many states and communities education has not been established in public consciousness as an indispensable service but constantly has had to fortify its entire program against competition from without. While we would not encourage the blind support of any public enterprise, with a public consciousness quickened to a sense of values we could assure education a place in keeping with its importance as one of the vital services to civilization.

The province of education should be clarified so as to make evident the relationship of enlightenment to the fullest life, individually and collectively. With this done, emphasis may be given to interpreting the school in terms of its product, and education will emerge completely from the realm of the luxurious and will be established as an indispensable service to mankind.

Music in World Citizenship

WILL EARHART

A PHILOSOPHY that long has pervaded the western world provides no rational basis for a theory of art. It ignores or rejects the idea that we have freedom of moral or esthetic choice. Religion and art must presuppose free choice; education cannot train for character, art appreciation or culture without it.

Music differs from the other arts in that it expresses feeling directly without using objects or forms other than itself over which to cast its aura of feeling. It is the direct voice of feeling itself and since it owns no other origin or association, it is the more plastic expression, adapting itself flexibly to every subtlest shade of feeling.

Since it voices broad, universal states of feeling, dependent upon no specific conditions of time and place that might tend toward division and disunity, music becomes a language for that wordless understanding by which men come to comprehend the hearts of their fellowmen and the meaning of life itself. By such states are men's souls nourished, strengthened and guided. Within that bond of understanding they discover again their essential kinship, find new dignity in human life and feel again the call of a world of peace.

Teaching Traffic Safety

DON KELLETT

The glare-ometer test shows how much light the eye can endure from approaching headlights.

"WE SEE horrible crash pictures in the daily papers and we read of all the lives lost each year in highway accidents. We know how to drive well enough to be granted licenses by the motor vehicles bureau. We are reasonably careful, but that isn't enough. We also should know what causes most smashups and how we can prevent them."

It was a high school pupil who was speaking.

The administration at Freeport High School in New York State has given serious consideration to this problem of traffic safety. By careful planning and research, Freeport High School now offers to advanced pupils a course in highway safety. There is no immediate method of tabulating results but John W. Dodd, superintendent of schools at Freeport, makes the following statement:

"The rewards will be gleaned from time to time in decades to come, when we can definitely note the infrequency of any highway mishap in which a former Freeport pupil is involved. Teaching a pupil to prevent a personal misfortune will have a correspondingly happy effect upon the motorist he meets on the highway. A hint to safeguard one life may, in turn, protect many lives."

At Freeport High School in New York State they have a theory that the first place to attack the tremendous highway toll in lives is by class instruction in safe driving, according to the author, a member of the faculty

At the present time the highway safety course is open to senior high school pupils. It is being planned to expand the program over a three year period, until eventually the majority of graduating pupils will have received training.

The venture at Freeport is under the direction of Clarence M. Genner, who heads the industrial arts department. Under his tutelage, the beginning driver is first shown how psychologic deficiencies may transform an otherwise normal driver into a highway menace.

In the laboratory, the pupil is tested for color blindness, a defect that may render a traffic light valueless to any-

one so afflicted. The judicious use of headlights in night driving is forcibly impressed upon the pupil as he faces the "glare-ometer" and discovers what light intensity the human eye can endure before tragedy occurs.

Reaction times for traffic crises are checked and the periphery of the eye is measured to reveal how perception decreases as the angle perpendicular to vision is increased. This teaches the pupil to be constantly alert for vehicles approaching from an intersection or preparing to pass the driven automobile without giving a warning.

From a chassis pupils learn the mechanical factors in safe driving. Left: An emergency crew demonstrates artificial resuscitation and inhalator technic.

A depth perception test, in which the pupil aligns movable standards with cords 20 feet long while peering through a restricted aperture, teaches him how to judge distance in passing the car ahead.

Excellent cooperation has been obtained at Freeport from local automobile associations, the local department of the New York State bureau of motor vehicles and the police and fire department.

A local automobile dealer donated a practice car for the actual driving experience, as well as a chassis for demonstration purposes. The facilities of his modern repair department are a constant source of interest for the mechanically minded. Lectures on front and rear wheel alignment were given by his service foreman.

The Freeport police department and traffic judge have been unsparing in their efforts to outline the problems of highway control. The doctor and nurse in charge of the high school health clinic have demonstrated first aid treatment at the scene of an accident. The class thrilled to a convincing exhibition of inhalator technic by the emergency crew of the Freeport fire department. Carbon monoxide rescue and artificial resuscitation received adequate discussion, as well as treatment for shock, a malady inseparable from automobile collisions.

The field department of the A.A.A. has obligingly outlined the course and offered valuable suggestions from its field of experience.

The entire student body, as well as those pupils actively engaged in the safety course, has been thoroughly indoctrinated with the spirit of highway safety. Motion pictures shown in the school assemblies have furthered safety attitudes upon the part of both the driver and the pedestrian. Pictorial explanations, photographed especially for this purpose and conspicuously displayed, have been included to reach that depth of awareness that lecturing and repeated drilling might fail to impress.

"While we are not equipped to assume full responsibility in teaching pupils how to drive," Mr. Genner explains, "we can spend profitable time in corrective work. If the pupil knows his weaknesses, he can take the necessary steps to safeguard against them."

It has not been difficult to obtain enthusiastic support among the pupils of Freeport High School in promoting highway safety. Juvenile minds are easily impressed with the importance of protecting their own and other lives on the highways at present and in future years. The subject may be taught satisfactorily from an objective point of view.

Gruesome prognostications may be minimized, as even the adolescent mind is capable of the realization that "Improvement" as a report card grade in highway safety may make unnecessary the same remark upon a hospital chart at some future date.

Free Rides for Parochial Pupils?

M. M. CHAMBERS

ANOTHER episode in the merry clash of opinions concerning public transportation of pupils in private and parochial schools is marked by a decision of the New York court of appeals, the highest court of that state, handed down late in May.

By a vote of four to three, the judges of the high court held that the New York law permitting local boards of education to transport parochial pupils in public conveyances in the same manner as public school pupils is unconstitutional. Accordingly the court ordered an injunction to be issued to prevent the levying of a tax for that purpose by a school district in the town of Hempstead, Nassau County. This reverses the judgment of the lower court (supreme court for Nassau County), discussed in The NATION'S SCHOOLS in May.[1]

It will be remembered that the lower court held that transportation to a school is not the same as actual schooling, and is not an aid to the school but only an aid to the pupil to enable him to obtain education in the school of his choice. This opinion was adopted by the three dissenting judges of the court of appeals, headed by Chief Judge Crane, but was not accepted by the four judges of the majority.

Judge Rippey, writing for the majority, indicated that the New York State constitution prohibits either direct or indirect public aid to denominational schools, and declared unequivocally that free transportation is a form of indirect aid to the school as an institution and hence contravenes the constitution.

In view of this decision the issue will be carried into the convention that is revising the New York constitution this summer and an effort will be made to amend the clause forbidding aid to nonpublic schools in such a way as to permit free transportation of their pupils at public expense. The outcome of the debates in the convention will probably determine the question in New York State, but the issue will be alive elsewhere because it exists in substantially similar form in several other states.

Like most questions touching religious institutions, it generates much emotional feeling. The issue is one for the people of each state to decide for themselves and therefore it should be approached with many reservations by any writer for a nationwide audience. Without presuming to provide any final solution, a few comments on the historic background of the relations between the American states and private schools are ventured here.

Generally, those who oppose free public transportation of private school pupils point to the American tradition of the separation of church and state. This separation has never been quite absolute. The relation is not one of antagonism, nor yet one of complete neutrality. Instead, it is one of mutual courtesy, not entirely unmixed with mutual favor.

The practically universal exemption from taxation of the property and income of churches, private schools and other nonprofit charitable organizations is a substantial form of public aid, based upon the theory that nonprofit religious, educational and charitable institutions provide public services which our national and state governments do not perform. The American tradition is one of freedom in matters of education and religion. It includes the long-standing custom of relieving approved private facilities for fostering these interests from the contributions to the state which are required of all individuals and organizations seeking private pecuniary gain.

Are public schools menaced by the provision of free transportation to parochial school pupils? Mr. Chambers debates the decision of the New York State court of appeals

In this country the state has never claimed unqualified supremacy over all rights of the individual. The federal constitution and all state constitutions enumerate certain rights upon which the state is forbidden to infringe. Nor has the American state ever presumed to monopolize the performance of all the collective functions of society. Many of these it leaves in whole or in part to private organizations, and upon those which are not for private profit it has always looked with favor.

Attendance at approved private schools cannot be forbidden, nor can the maintenance of law-abiding private organizations of any kind be prohibited unless they are adjudged inimical to public order and decency or unless they are convicted of fraudulent practices. All this is merely to show that our society is one in which many governmental units and an immense number and variety of nongovernmental organizations play their parts side by side. No private organization is temporally superior to government, but there are spheres of social service which government does not monopolize and others which it does not enter. In these spheres the American policy has been to encourage beneficial private organizations.

If private schools are to be regarded as divisive influences not to be encouraged by the civil authority, this represents a modification rather than a perpetuation of American tradition. Owing to many factors in the modern social and economic scene, the sphere of government is expanding, and rightly so. But does this necessitate any less favorable attitude toward private religious, social

[1] "Public Aid to Nonpublic Schools," The NATION'S SCHOOLS **21:** 39-40 (May) 1938.

service and educational enterprises which are bona fide, especially if such an attitude would result in a narrowing of the scope of free choice by individuals in matters of education or religion?

The state does not prescribe any religion, nor does it prescribe nonreligion or compel the complete separation of education and religion. We do not require every child to attend a public school; we only compel him to attend some school approved by the state. If he prefers a private or denominational school, he is entitled to attend it. However, the theoretical right to attend a private school, like many other rights, is tacitly qualified by the silent proviso, "if he is financially able to attend." Freedom of choice and of opportunity is increasingly hampered by economic barriers. If the state chooses to recognize this situation and provide transportation to pupils in order to preserve their freedom of choice of a school, does this necessarily mean a linking of church and state in violation of any American tradition?

Private and sectarian schools are different in tone and spirit from public schools, it is true. In fact, their very difference is their only reason for existence. Is it well to be in haste to stigmatize them as discordant and divisive agencies? May it not be that a great democratic society can prize them as sources of variety in the national culture?

It has been our pride that men of all races and religions, including those of no professed religion, and men of diverse political beliefs can all be good Americans. We abjure the regimentation of opinion. Progress comes through variation. Should we continue to encourage individual variation by acting to keep open the narrowing avenues of choice for individuals who are not among the economically privileged?

The foregoing is merely one of many aspects of the complex issue of public transportation of private school pupils now faced by New York and other states. There are many who believe the state should provide, through modern agencies of transport, substantially equal opportunity to every child to reach the doors of the school of his choice, when this can be done without tending to disorganize the public schools. There are many others who believe that any form of public assistance designed to facilitate attendance at private schools should cease. Some of these think the idea is fraught with menace to the future of the public schools and to the continued march of democracy. As always, a tenable balance must be found which will allow maximum freedom of individual choice consistent with the common welfare.

Two Myths in Education

HENRY H. HOLMES

STATE requirements for certificates to teach are a weariness to the flesh and a trial to the spirit.

Yet it has to be admitted that the laws and regulations which have forced teachers in our public high schools to obtain degrees, to specialize to some extent in the subject they are to teach, to study the general theory of education and to acquire skill in teaching before they are allowed to practice in regular positions have probably helped greatly to improve the work of the schools. There is a paradox here to be examined intently.

Many educators would favor a regulation permitting graduates of approved colleges to teach on trial in our public schools without meeting any requirements in education at all. I believe that this is not the answer; but as a veteran in the professional training of teachers, I admit that something ought to be done.

If we are convinced that knowledge of a subject, understanding of education and developed skill in teaching all are desirable prerequisites for entrance upon school work, how can we make them all more vital, real and permanent than they now seem to be?

The trouble goes back, in my opinion, to two educational myths. One is the myth of mental discipline. Teachers of academic subjects and a large part of the public still believe that if you study one subject hard enough and long enough you train your mind so that you can solve problems in other subjects without difficulty.

The other myth is worse: it is the belief that a credit on the academic books is equivalent to a definite increment of knowledge, understanding or competence. This is the semester-hour myth.

Certificates to teach ought to be granted for demonstrated competence, not for paper records. The competence demanded should consist of knowledge in a subject to be taught or in two closely related subjects, general understanding of education and skill in the procedures of instruction and the guidance of learning and activity on the part of individual pupils.

In no one of these three phases of competence are standards as high as they should be. How can they be raised with any certainty and without opening any wider the door to politics or to state interference with academic freedom?

I suggest the creation of state boards of certification composed of representatives of (1) the state department of education, (2) the state organization which is the state constituent body of the N.E.A., (3) the state university or universities belonging to the Association of American Universities or the American Council on Education, (4) the state association of school superintendents or the constituent body for that state of the A.A.S.A. and (5) the public at large.

The principle of this suggestion is that the certification of teachers ought to be predominantly a function of an autonomous profession within the state. Boards of certification of this representative character would be capable of discarding certification by credits and establishing in its place certification through examinations and an internship or period of cadet teaching under inspection or by the approval of institutional degrees that really mean fitness to teach.

When the Pupils Participate in School Control

E. C. CLINE

ONE of the attempts to make school lifelike is permitting pupil participation in affairs of the school. Experiments in this field illustrate beautifully the problems, dangers and advantages of all attempts to make a school democratic and lifelike from the pupils' point of view.

Confusion first arises from failure to distinguish clearly three possible arrangements for pupil participation. The one most publicized is that which is properly called pupil self-government. Under this form a government organization is set up that parallels some form of adult government. One school may have a city form with mayor, council, police and fire departments and courts.

This form is often simplified by having only a student council with committees or appointees to control various pupil affairs. Theoretically, this official organization controls various pupil affairs. Pupils are arrested for infractions of rules passed by the official body, are arraigned before pupil courts, sentenced and punished. Sometimes the teachers leave the school for a day and the pupils take complete charge. Such replicas of adult government are said to demonstrate that pupils can govern themselves and to give the pupils genuine experience in social control.

Cooperative Control

A second form arranges for pupils to share with teachers in such control. The school council is made up of teachers and pupils; the teachers and pupils share opinions and points of view so that school policies may reflect the rights and problems of both groups and so that free discussion may enlighten each group as to the needs, feelings and opinions of the other.

Such an organization provides not so much for legislation and control, as for clarification of points of view and for mutual understanding. It provides for democracy in the sense that all may express their opinions and that all regulation is made and enforced with an understanding of the feelings and personalities of those on whom the regulation is enforced.

The real seat of authority is frankly in the hands of those legally responsible for running the school but it is exercised with the intelligence that comes from a first-hand comprehension of the human values of all persons concerned.

The third form also frankly lodges all control in those legally charged with such control but allows free pupil participation in the management of the activities of the school and free pupil discussion of policies in voluntary organizations of pupils.

In such an arrangement, for example, pupil groups manage ticket sales, conduct school assemblies, operate visual education machines, publish the school paper and annual, help in the management of athletics and other school public performances, serve on all kinds of committees of arrangement, and are free to organize extracurricular groups for the promotion of ideas or interests of their own initiation.

Furthermore, pupils are encouraged to form voluntary representative councils of their own for the discussion and understanding of school policies; such groups may include a vocational council, an athletic council, a civic council and a health council. These councils may call upon school officials, city officials or anyone else to discuss and explain matters of interest and concern; they also may express and formulate opinions of their own to present to school authorities for consideration.

All these pupil activities are frankly carried on with the advice and guidance of a teacher sponsor. There is no pretense that ultimate real control is lodged anywhere but in those who actually have the responsibility of such control.

A great amount of the failure and dissatisfaction in various pupil participation schemes is due to the fact that these three distinctly different phases of participation are so confused that the plan is vulnerable to the charge of inconsistency and hypocrisy and brings about so much

Suppose this young man were taking office of school mayor. Would he and his fellow officials become arbitrary and snobbish and exercise power for its own sake? Would cliques, favoritism and petty politics flourish? These are arguments used with good effect against those experiments conducted in pupil self-government.

wrangling, unevenness, friction and misunderstanding that the end result is merely a continual series of impasses that have to be resolved by arbitrary official ukases.

As a next step the plan becomes merely perfunctory as far as pupils are concerned.

Then comes eventual abandonment of the entire plan and thereafter the ordinary school routine seems even more arbitrary and undemocratic because of the false hopes engendered during the interim of the pseudo-democratic régime.

The first requisite of a successful plan, therefore, is a clear understanding of precisely what is to be done, what plan is to be used and how far and in what manner pupil participation is to be exercised.

The second point to be considered, if confusion is not to result, is a clear understanding of the realities of the situation, of the actual factors involved in democratizing a school. One concrete set of criteria that may be used to judge the factors and difficulties involved is the usual objections to pupil participation schemes. There are six of these.

Objections to Pupil Control

1. The procedures are undemocratic. Pupils are too young to carry so much responsibility with equanimity. Those in power become arbitrary and snobbish; they exercise power for its own sake. Those not in power do not willingly acknowledge authority from those of their own age because they do not honestly believe people of their own age can properly handle such responsibilities. A genuine rift is created between the leaders and the led. Cliques, favoritism and petty politics flourish.

2. They are inefficient. Pupils are inexperienced in all matters of control; some school matters baffle even the most highly trained mature educators. Costly errors are made; the right decisions are slowly arrived at and clumsily and expensively enforced. Even the things that pupils can do can be done more efficiently by teachers.

3. They are spurious and hypocritical. Even the dullest pupil knows that no pupil organization has any legal status and that any pupil action, no matter how camouflaged, is valid only by the sufferance of the school officials. Any form of pupil government is perforce only make-believe. Even such a spectacular "stunt" as allowing pupils to have complete charge for a day is recognized as a "stunt," and no one really believes that real school was had.

4. They are not even replicas of real life. In real life citizens are governed by those legally entrusted with government affairs. Groups of adult citizens, for example, do not regularly meet with the city council, discuss problems with them and join in the voting on city ordinances; certainly children do not do such things outside of school. Pupil government is just another example of the danger that lurks in reasoning by analogy. The cleverer the imitation, the more disastrous is the error of acting as if it were the real thing. Finally, one might raise the question of whether an exact replica of adult government practice would be a good thing.

5. They emphasize social control rather than self-control. Intrinsically, self-control is more valuable than social control. The real basis even of successful social control is not more social control but more self-control. The proper function of social control itself is the development of more self-control.

The spectacular and obvious aspect of pupil government is that of social control at the time when self-control needs most emphasis. As one reads the literature of pupil government, one is struck by the numerous illustrations referring to proceedings against pupils for misdemeanors and the paucity of references to cases of constructive efforts to inculcate and encourage good citizenship. Perhaps that is another case of pupils' imitating their teachers too closely.

6. They actually discourage participation in school activities among pupils generally. The more officious and active the relatively few pupil officials are, the less incentive there is for others to do things. Adult society displays precisely the same phenomenon. The real value of extracurricular activities, for example, varies directly with the amount of teacher interference and direction.

Of course all these objections have their answers; they vary in importance and validity. They are not introduced here to prove that pupil participation should be avoided. They are cited merely as a definite, concrete statement of the dangers and difficulties involved. If we take our three plans and confront them one by one with these objections, we shall find that the objections apply with less cogency as we proceed from plan 1 to plan 3.

The final test is the positive one: Does plan 3 (pupil participation in the activities rather than in the control of the school) set the stage for the values we hope to get from such procedures? These values are such qualities as self-control, cooperation, planning, organizing, evaluating, leadership, followership, initiative.

Participation in Real Activities

The necessary situation for such learning is that in which one learns to do by doing in genuine social situations. Certainly this condition is met perfectly; plan 3 involves the participation in activities that are real, not fabricated, that actually need to be performed, that do not call for the immediate exercise of qualities or abilities that pupils do not possess. There is supervision of teachers, yes; why not? The supervision is natural, moreover, and aboveboard.

It is surprising how many real school situations provide opportunities for pupil participation. From 60 (minimum) to several hundred pupils may participate in thirty school assemblies each year. A stunt night program for which each group is invited to provide a "stunt" will include at least two-thirds of the enrollment. Operation and care of visual education equipment can occupy from 10 to 30 highly skilled, responsible pupils. To those may be added all the offices and committees of an extracurricular program.

Hundreds of such opportunities are available if the stage is set for a school of activities and if pupils are allowed to work wherever possible. And, while the paper glory and unearned extravagant honor that go with the president of the school may exceed the public acclaim of the foreman of 25 projection machine operators, the latter is getting more and better school experience in a real job and, moreover, is performing a real service to the school.

How Detroit Hires Its Help

MARY M. CAROTHERS

THIS report will describe briefly methods used in employing "noneducational" personnel in the Detroit public schools.

Of the 11,011 employes of the board of education, 3287 are classified as "noneducational." They might be grouped as follows: (1) clerical, (2) building operation, (3) building maintenance and (4) auxiliary agencies, including bindery, lunchroom, bath attendants, bus attendants, matrons and domestics.

General requirements of all noncontract personnel are regularly observed. They are as follows:

1. Applicants must be bona fide residents of the city of Detroit and must be native or naturalized citizens. First papers for naturalization make application possible. This fact is checked and unless final papers are obtained within a specified period the employe may not remain on duty.

2. Applicants must be able to fill out their own blanks and to speak and understand the English language.

3. While no definite age limit is set, older applicants are scored down in competition with other applicants. No minimum age limit is set but for all classifications those under 22 to 24 years of age suffer loss of points in competition with other candidates.

4. Every candidate must undergo a physical examination and be approved before permanent appointment is made. Often periodical rechecks are recommended by the medical examiner to follow up evident tendencies. Approximately 1100 medical examinations of people in the noncontract group are made annually.

Employment of the nonteaching staff is done by two methods. Competitive examinations are given for placement in the following groups: (1) clerical, including junior clerk, junior typist, junior stenographer and junior bookkeeper; (2) building operation, including assistant engineers, assistant janitors and coal passers; (3) lunchroom, including student managers (for the position of manager in high and intermediate schools).

An arbitrary scoring scale has been set up for clerical workers. Candidates who receive a total of 75 points or more are placed on the eligible lists. Free in-service class work is provided this group in both shorthand and typewriting.

The higher ranks in these groups are filled by promotion.

The noncompetitive division includes the following employes: (1) maintenance; (2) miscellaneous, including bindery employes (except clerks), lunchroom help, bath attendants, bus attendants, matrons and domestics, and (3) building operation, including cleaners.

Those in the foregoing classifications are employed through a system of proved ability during substitute service. Applications for most of these classifications are received only during the month of August. Each applicant is personally interviewed and notes made on the application blanks indicating possibilities as a future employe. The blanks are studied, classified and, after the undesirables are discarded, placed in files as "active material" by classification. Substitute service is then done by these applicants and they gradually become the regular employes as vacancies occur.

Applications for placement in clerical positions are accepted at any time from four year high school graduates who are *bona fide* residents of Detroit. These persons are then notified when an examination is announced.

Since the adoption of the board of education by-law on Nov. 20, 1928, requiring employment of the clerical staff by competitive examination, much progress has been made toward a high standard of qualifications in these employes. Tables 1, 2, 3 and 4 indicate the selective process used.

The policy in the earlier years of this plan was to weigh the scores in order to place on the various eligible lists approximately enough candidates to fill probable vacancies. This

Table 1—Clerks

	1929	1930	1934	1935	1936 Male Only
Applicants examined	180	443	459	266	35
Unsuccessful	45%	80.5%	67.1%	71.8%	17.1%
Successful	55%	19.5%	32.9%	28.2%	82.2%
Placed	55.5%	18.6%	10.5%	13.3%	*

*Incomplete.

Table 2—Typists

	1929	1930	1934	1935	1936
Applicants examined	85	185	212	114	217
Unsuccessful	84.7%	76.2%	81.6%	58.7%	77.4%
Successful	15.3%	23.8%	18.4%	41.3%	22.6%
Placed	92.3%	45.4%	28.2%	17%	*

*Incomplete.

Table 3—Stenographers

	1929	1930	1934	1935	1936
Applicants examined	160	200	198	145	228
Unsuccessful	50%	73%	40%	47.5%	83%
Successful	50%	27%	60%	52.5%	17%
Placed	55%	29.6%	13.4%	14.4%	*

*Incomplete.

explains the large number of failing candidates, failures being on comparative basis only. Beginning in 1935 an arbitrary scoring scale was set up and all those candidates who received a total of 75 points or more were placed on the eligible lists.

Originally, of a possible 100 points in the various tests the division was 50 per cent for technical qualifications and 50 per cent for general qualifications, including experience, health, character and personality.

The present examinations are scored on the following basis:

TECHNICAL QUALIFICATIONS		60
Aptitude for position	20	
Special abilities	30	
Typing		
Stenography		
Bookkeeping		
Intelligence	10	
GENERAL QUALIFICATIONS		40
Experience in this or similar work	10	
Physical fitness	5	
Age	5	
Motive in obtaining this placement	5	
Personality estimate	10	
Appearance	5	

An important feature added to the administration of this group of personnel is in-service classwork in shorthand and typewriting offered without cost to monthly rate regular employes. These classes are taught by regular teachers of commercial subjects and meet from 9:30 a.m. to 11:30 a.m. Saturday morning. Fifty employes are enrolled in these courses at the present time. The following courses are offered:

1. Review and remedial typing for qualified typists who need to improve speed and correct habits that are impeding progress in the present position.

2. Beginning typing for employes who have had no formal instruction in typewriting but call themselves "self-made" typists.

3. Advanced shorthand and dictation for stenographers who get little or no dictation in present positions but wish to prepare themselves for advancement to a higher classification.

No beginning shorthand is offered because of the small amount of class instruction possible and the technical nature of the subject.

Progress tests for two purposes are given at irregular intervals: (1) for demonstrating the employe's actual ability to him and (2) for promoting to different classifications on the basis of skill. For example, a junior clerk may attend classes, take the test and, if qualified and holding a position that requires the ability of such person, be promoted to the title of junior typist, or from junior typist to junior stenographer. These tests make these minimum requirements: (1) for junior typist, ability to type at a rate of 40 words per minute or more, and excellence in rough draft copy and tabulation tests; (2) for junior stenographer, ability to take dictation at 90 words per minute and transcribe at 20 or more words per minute and typewriting requirements as for junior typist.

Many promotions of present employes have been made as the direct result of these classes.

Since 1934 the managing staff in lunchrooms in high and intermediate schools has been selected by competitive examination. Candidates must be graduates of four year college courses with majors in institutional management. Notices of examinations for placement in the position

Table 4—Bookkeepers

	1929	1930	
Applicants examined	24	59	No Examinations Since
Unsuccessful	66%	74.5%	
Successful	34%	25.5%	
Placed	66%	46.6%	

Table 5—Student Lunchroom Manager

	1934	1935	1936	1937
Applicants examined	17	17	18	12
Unsuccessful	47%	29.4%	27.7%	25%
Successful	53%	70.6%	72.3%	75%
Placed	11.1%	41.6%	61.5%	11.1%*

*Incomplete.

Table 6—Assistant Engineer

	1930	1934	1936
Applicants examined	59	90	65
Unsuccessful	37.2%	67.7%	16.9%
Successful	62.8%	32.3%	83.1%
Placed	21.6%	27.5%	33.3%

Table 7—Assistant Janitor

	1936
Applicants examined	542
Unsuccessful	76.5%
Successful	23.5%
Placed	43.3%

Table 8—Coal Passer

	1936
Applicants examined	139
Unsuccessful	82%
Successful	18%
Placed	88%

of student lunchroom manager are sent to those who have filed application since the last examination and to various schools emphasizing this type of preparation.

The examination consists of two parts: (1) a written test covering institutional management knowledge (a total of 40 points) and (2) a personal conference in which an estimate is made of certain general qualifications (appearance, personality, physical fitness, motive and age). The candidate also takes a general intelligence test and is scored on training and experience.

The student lunchroom managers then enter a twenty weeks' training course or internship in which they are introduced to various types of lunchrooms and are given practice in every phase of lunchroom work from cleaning to practice managing. If they prove capable, at the end of the training course they are placed in vacancies as they occur.

Table 5 indicates the selective process used in this classification.

Applicants for placement in the positions of assistant engineer, assistant janitor and coal passer are employed by competitive examination.

After satisfying the general requirements indicated in the beginning of the report, examinations are given as follows:

The assistant engineer's general qualifications, which include the number of his dependents, home ownership, appearance, physical fitness, personality estimate, age and motive, total 40 points. His technical qualifications count 60 points and are based on a test covering all phases of steam engineering.

The assistant janitor's general qualifications are the same as those of the assistant engineer, but they are scored at 55 points. His technical qualifications, which are scored at 35 points, include (1) general aptitudes, including ability to follow written directions and arithmetical reasoning; (2) knowledge of tools; (3) building custody and supervision, and (4) building maintenance inspection.

The general qualifications for the coal passer total 50 points and are the same as those for the assistant engineer except that they emphasize special training in this trade. His technical qualifications total 50 points and are measured by means of intelligence and mechanical aptitude tests.

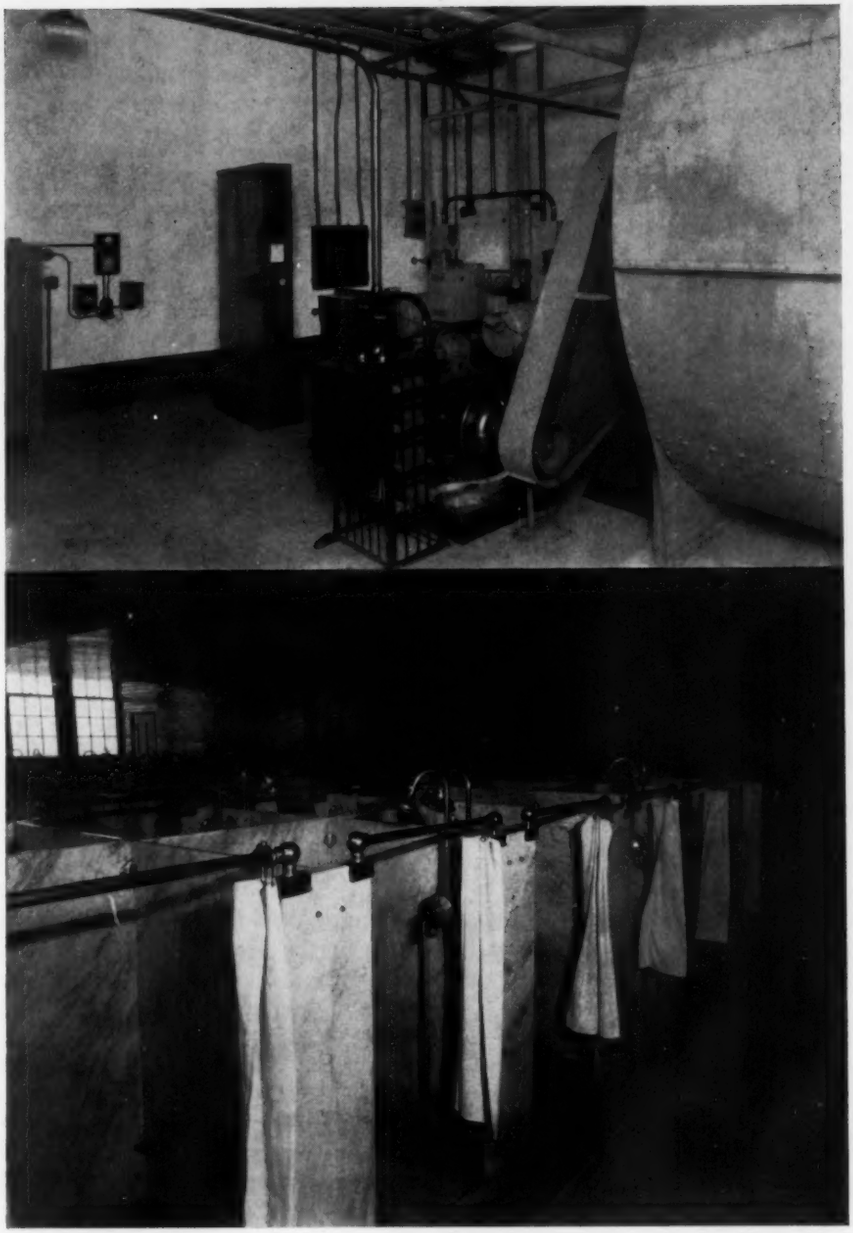
Tables 6, 7 and 8 indicate the selection since institution of this procedure.

One examination was held in 1930 for the purpose of making up an eligible list of firemen. Since that time positions in this classification are filled by license requirement fulfillment and seniority from the coal passer group.

Courses for building operation employes have been offered at the Wilbur Wright High School since 1934. This year the courses have been revised and are under the general direction of a special committee. Successful completion of units of instruction is now made a matter of record in the employe's file in the personnel records division. One hundred ninety employes are enrolled in these courses at present.

While much has been done in the selective procedure for noncontract personnel, there still are certain phases to be improved. More work can be done on perfecting the results of the personal interview and the resulting estimate of the candidate's personality. A more careful record of previous experience and training is desirable. Probable success in the position obtained would be strengthened by a systematic introduction and adjustment to the duties.

In the noncompetitive division a smaller turnover would be conducive to better results. Study of this problem will doubtless result in improved selective procedure.



What of the men who make the wheels go round and who keep the building clean? Competitive examinations are held for the positions of assistant engineer and assistant janitor. The higher positions are taken care of by promotion when the employes' records are good.

Teachers Must Listen More

Says BRUCE CURRIE

The teacher who knows most is the one who listens best.

NEARLY all schoolmen have noticed that, in many instances, teachers become worse professionally with age and experience. They seem to learn less and less about more and more the older they become. Further, the more experienced they are the more they have to talk about and the less their pupils need to talk.

This type of person is a good teacher the first few years. This is apparently accidental; the teacher has little to say because of lack of information and, therefore, allows the pupil to do all the talking and acting. In this way he has stumbled on to the basic principle of all teaching: pupil activity.

Our experienced teacher, however, knows too much! He knows so much that he has no time to permit pupil initiative or action. Doubtless, this is the most dangerous of all types of leaders. This is the dictator.

Strange as it may seem to those who really understand the working of a democracy, it is probably true that fewer democratic principles are practiced in the classroom than anywhere else. The pupil apparently has nothing to say about the whole matter. While it is doubtless true that in the elementary grades this principle must be followed largely because the younger pupil has no idea as to what he wants, in the high school this is not true.

The desire for self-expression is one of the deepest urges of mankind. One might almost say that it gains the ascendency over all the others. To stifle free speech and expression of opinion is to kill genius at its source. Yet many of our teachers continue along the old paths of indoctrination and autocracy.

Apparently many high school teachers believe the pupil incapable of thought. An example of what a pupil group can do is evidenced by a rural school democracy class that evolved a definition of education within just a few minutes of discussion among themselves. Education is "Learning how to live."

To become a good teacher requires practice in the art of getting pupil action. Most any teacher who has prepared for a class would like to lecture the entire period. It is easier. Further, not so many embarassing questions will arise, questions that the teacher cannot answer.

Again, teachers are likely to become afflicted with "correctiveitis." This is always fatal. Let no one be deceived. If you are one of that type, your pupils will hate you. This is an affliction that troubles many. Everything that is not just "so" must be restated or a correction made.

Then, teachers pride themselves on how much information they have "put out" during the semester. Don't fool yourself, teacher; you did "put it out," but it stayed out. Nobody absorbed it. Teachers as a class are a little crazy when it comes to learning the facts of knowledge. They want to cram just as many facts down the unsuspecting pupils' throats as they can.

The pupil is untouched. He knew nothing when he started and he knows nothing now that he is through; that is, if all his teachers are like this. He sheds it like a duck sheds water.

All boiled down it amounts to this: Our experienced teachers, many of them, know so much that they want to tell about (same urge in them as in the pupil) that there isn't time for pupil self-expression. Until the experienced teacher learns to keep his mouth shut and to listen to the high school pupils, permitting these youngsters to develop and expand their ego, we are still going to be forced to hire the inexperienced teacher in self-defense. The beginning teacher, who knows not and knows that he knows not, will listen attentively and sympathetically to the expression of ideas by pupils and will develop the two traits on which our civilization is built: that of expressing oneself in public and of independent thinking.

Successful teachers need only know how to stimulate thought and obtain expression of this thought. If they can do this, the self-generative pupil will gain factual knowledge incidentally. The teacher who knows the most is the one who listens best.

Britain's Teacher Annuities

FLETCHER HARPER SWIFT

NATIONAL grants for education in England and Wales began in 1833 when the House of Commons set aside 20,000 pounds to aid in erecting schoolhouses for the education of the poorer classes. From this modest beginning the present system of grants-in-aid evolved. This system now extends to practically every aspect of education and includes not only public secular institutions but church schools and certain other schools not conducted for private profit.

Teachers in educational institutions, aided by grants from the national government, now come under one or the other of two large pension systems, commonly termed schemes: (1) the Federated Superannuation System for Universities dating from 1913 and (2) statutory schemes administered by the board of education, the agency through which the state discharges the major portion of its functions related to the administration, supervision and support of schools in England and Wales.

Majority Under Act of 1925

The majority of teachers and organizers now receive superannuation benefits provided by the Teachers (Superannuation) Act of 1925, and amended in 1928, 1933, 1935 and 1937. However, a small number of teachers received benefits under earlier acts.

The Teachers (Superannuation) Act of 1925 continued the policy of requiring teachers to contribute 5 per cent of their annual salaries and imposed a like contribution upon employers. The latter provision aroused so much opposition that it did not become effective until April 1, 1928. It was also decided that the board of education, in making grants to local education authorities, should reimburse employers' pension contributions on the same basis as for salary expenditures, namely, 60 per cent in the case of elementary teachers and 50 per cent in the case of all other teachers. Claims not covered by teachers' and employers' contributions and certain unimportant local miscellaneous receipts are met by state grants.

No provision is made for creating a permanent state fund; on the contrary, the board of education applies teachers' and employers' contributions to current annual expenditure, thus reducing the net sum to be voted by Parliament for grants-in-aid. However, the act requires that an account shall be established and that the treasury shall cause an actuarial inquiry to be made every seven years to determine to what extent the proceeds of contributions are sufficient to pay the claims chargeable to the account.

The sum total of expenditures for teachers' superannuation claims in the year 1935-36 amounted to 6,807,995 pounds. Of this total, teachers' contributions provided 40.4 per cent and board of education grants, 40.7. The gross amount due from employers was 2,749,264 pounds, but grants from the board of education reduced this to a net sum of 1,269,120 pounds, *i.e.* 18.7 per cent of the total receipts.

The Superannuation Act of 1925 not only covers all grant aided elementary schools and all other grant aided institutions, except universities and university colleges, but empowers the board of education to establish schemes for nongrant aided schools, technically termed "scheme schools," including schools conducted for private profit. It also empowers the board to enter into reciprocal arrangements with any authority administering any statutory teachers' superannuation scheme in any part of His Majesty's dominions.

As originally drafted, the scheme of 1925 was designed to apply primarily to teachers and "organizers" (*i.e.* administrators and supervisors) serving in grant aided institutions under the jurisdiction of the board of education. Gradually other groups were included as follows: In 1930 (1) teachers in poor law schools; (2) all teachers in recognized nursery schools; (3) teachers employed in the Royal Air Force Teaching Service; in 1931 (4) teachers in juvenile employment and training centers; in 1934 (5) teachers in remand (detention) homes.

Teaching in the Provinces

The Teachers (Superannuation) Act, 1925, Section 11, provides that a teacher who discontinues contributory service (*i.e.* service performed after the act of 1925 became effective), in order to serve as a full-time teacher in any part of His Majesty's dominions outside the United Kingdom, may have the period of his absence up to four years treated as contributory service on the payment of a contribution amounting to 10 per cent of his salary during the period of his absence. This 10 per cent contribution is designed to cover the 5 per cent contributions which would have been made by the teacher and by his employers if his contributory service had not been interrupted. This privilege was extended gradually until it was made applicable to service to any school in a foreign country approved by the board of education.

In the period from April 1, 1926, when the foregoing provision first became effective, until Dec. 31, 1936,

This article is taken from the author's monograph on teachers' pensions in Wales and England, which will be published by the University of California, where Doctor Swift is a professor of education

the board of education had approved of 1218 cases of pensionable absences.

The Teachers (Superannuation) Act, 1925, and amendments thereto, provide the following benefits: (1) two types of superannuation allowances—a lump sum and a life pension; (2) the privilege of allocating no more than one-third of the pension to the spouse or to one other dependent of the pensioner; (3) disability allowances; (4) short service gratuities; (5) death gratuities; (6) repayment of his own contributions plus 3 per cent compound interest to a teacher who leaves the profession without becoming eligible for a pension.

Eligibility Depends Upon Service

Eligibility for superannuation allowances depends upon age and upon types and length of service varying from ten to thirty years. Teachers may retire on pension at 60, but in certain cases may continue teaching until 65 years of age. Pensionable service may be "recognized," "contributory" or "qualifying." Recognized service is service performed before the act of 1925 became effective and includes recognized and qualifying service as defined in the Teachers (Superannuation) Acts, 1918-22. Contributory service is service performed after the act of 1925 became effective.

Upon retirement at the age of 60 or later, a teacher is entitled to:

1. A lump sum equal to the smaller of the two amounts: (a) one-thirtieth of his average salary during his last five years of contributory service multiplied by his total number of years of service, or (b) a sum equal to one and one-half times his average salary during the last five years.

2. An annual pension equal to the smaller of the following two amounts: (a) one eightieth of the product of the teacher's average salary during his last five years of service, multiplied by his total number of years of service, or (b) one-half of his average salary during his last five years of service.

Section 1 of the Teachers (Superannuation) Act, 1937, authorized the board of education to make rules under which a teacher or an educational organizer shall be allowed to surrender a portion of his pension in return for exercising the privilege of allocating a part thereof to his or her spouse, or to one dependent, not necessarily a relative.

The board of education has provided two options, A and B. Under option A, the benefit consists of a pension payable to the beneficiary after the teacher's death. Under option B (applicable only to a spouse), the benefit consists of three parts: (1) a pension equal to the difference between the full pension to which the teacher is entitled and the amount allocated to his beneficiary; (2) an annuity payable annually to the teacher while his (or her) spouse is alive and ceasing on the death of the said spouse; (3) a pension of double the amount of the aforesaid annuity payable to the surviving spouse of the deceased teacher. Certain limits are placed upon a teacher's allocation, the most important of which is that he shall not surrender more than one-third of his pension.

"Under option A, if the beneficiary dies before the teacher, the latter's pension is continued at the amount to which it has been reduced by the amount surrendered. Under option B the annuity received by the teacher in part exchange for the portion of superannuation allowance surrendered ceases if the wife or husband dies before the teacher and thereafter the teacher receives his full pension, less the full amount surrendered; but if the teacher dies first, the widow or widower receives a pension double the amount of the annuity referred to previously."

Requirements for Pension

A teacher must have completed at least ten years of approved service in order to become eligible for a pension. Teachers who become mentally or physically incapacitated for service before reaching the retirement age but who have completed at least ten years of service are eligible for infirmity allowances. If disability occurs earlier, such a teacher is entitled to a short service gratuity not exceeding one-twelfth of his average salary for each year of recognized or contributory service.

Death gratuities are payable on a teacher's death to his legal personal representatives. If a teacher who has completed not less than five years of pensionable service dies while in contributory service, the gratuity amounts to the larger of the following two sums: (a) a sum not exceeding his average salary during the last five years of service less "the amount of any additional allowance or short gratuity service previously paid to him," or (b) "a sum not exceeding an amount equal to the amount of the additional allowance which the board might have granted to him if he had at the date of his death" become permanently incapacitated.

When a teacher dies after having become eligible for a pension "and the aggregate amount of the sums paid to him and to his legal personal representatives by way of annual superannuation allowance and additional allowance" is less than the amount of his average salary during the last five years, there shall be paid to his legal personal representatives "a supplementary death gratuity not exceeding the difference between the amount of his average salary (during the last five years) and the said aggregate amount."

Provides Repayment

The act of 1925 provides for repaying to any teacher who leaves service without becoming eligible for a pension a sum equal to his total contributions plus 3 per cent compound interest, less any sums previously received by him as disability allowances. Such a provision is exceedingly important since approximately three-fourths of all local education authorities require women teachers to resign upon marriage.

During the calendar year of 1936, under the act of 1925, 4361 teachers received repayment of contributions amounting to approximately 284,378 pounds. Of this total number 2469 were women teachers who had retired on marriage. During the same year, under the act of 1922, approximately 2948 pounds were repaid to 142 teachers of whom 13 were women retired on marriage.

Private schools may be approved by the board of education for participation in superannuation benefits. The governing bodies of each school, termed a "scheme school," must guarantee that the payment of contributions shall be a condition of the

service of all teachers appointed to full-time service after the date the school was approved, except teachers excluded by the provisions of the act. All teachers and organizers of scheme schools (except proprietors of schools conducted for profit) are eligible to the same benefits as those provided for teachers in grant aided schools. Up to Dec. 31, 1936, 200 scheme schools had been approved for participation in superannuation benefits.

The first septennial inquiry reported by the government actuary to His Majesty's treasurer was published April 17, 1935. This report attempted to determine the adequacy of teachers' and employers' contributions toward payment of claims during the contributory period, *i.e.* since June 1, 1922. The valuation taken was that of March 31, 1933. On this basis, the valuation showed a deficiency of 9,974,642 pounds, attributed by the actuary chiefly to the increased longevity of teachers and to the salary increases resulting from the adoption in 1921 of increased state salary scales known as the Burnham Scales.

To cover the deficiency, the actuary recommended an increase in the combined rate of teachers' and employers' contributions from the present 10 per cent to 12 per cent. On April 6, 1936, the House of Commons rejected this proposal. The reasons given were that the pension system set up by the act of 1925 had been in operation for a comparatively short period and that exceptional conditions had affected the rate of teacher retirement during part of that period. The increase, then, was delayed.*

*Material in the foregoing article is taken from the author's monograph, "Financing of Grant Aided Education in England and Wales," to be published as University of California Publications in Education, vol. 8, No. 5.

Notes to the Principal

J. M. BENNETT

ONE morning tiny freckle-faced Johnny, who lives in Tin Can Alley, held in his little dirty hand a badly soiled and crumpled note which he explained was sent by his mother to the principal. The note said:

"Mister principall, it has come to my ear you have one of them thare eleckrick spankers. Dont you dair to use that thing on my Boy whip him with a swich if he neads to but dont you put that thare thing on im."

An investigation revealed that the electric switch in the principal's office had been referred to by some of Johnny's playmates, and Johnny, knowing only one kind of switch and its use, had jumped at conclusions, causing himself and his mother unnecessary anxiety.

No small part of the conscientious principal's worry is brought about by notes or letters written by misinformed or uninformed patrons of the school, portraying the fact that either the principal himself or some member of his faculty has been misunderstood or misrepresented.

Written messages of this type sent by deeply concerned parents may appear so comical to the informed, or become so ridiculous when all the facts are known that they, in spite of the pathetic ignorance they reveal of the sender, often cause a smile to flicker across the face of the gravest school man.

One day during the noon hour at a mining village school, a little girl of the intermediate grade ran into my office. Almost breathless, and without ceremony, she rushed up to my desk gasping, "Here's a note. Mrs. M..... told me to bring it to you quick!" I hastily read: "dear prinsipel Joe teacher gave him somtin in a little tub for to wash his teth he has et hit al up. Is hit pisen let me know quick."

It developed that the first grade teacher, while conducting a unit in health, had furnished each of her pupils with a small tube of tooth paste which the children had been permitted to take home that day at noon.

Sometimes home assignments of the simplest type will bring from the parents a "barrage" of notes. On the morning following a fifth grade home assignment requiring each child to draw an outline map of the United States, the principal received a small United States map together with a note which read:

"Dear Mr. Bennett, William's teacher wants him to make a map for her. I am sending one I tore out of a old geography book. it is much better then any of wens can make for her. if it aint alright tell Miss D..... (William's teacher) it was the best one wens could find."

A visit to the home of this well-meaning mother was necessary to explain to her the true meaning of home assignments and how she could cooperate with the school to the best advantage. William had been transferred from a progressive school and his mother did not understand homework.

Remarks made in the classroom by teachers often come back to the principal via notes written by parents.

"Dear Mr. Bennett," wrote a husky Alleghany mountain lumberman, "I know Philip is a bad boy, but he is not a block-head, and I don't intend to have Mr. X call him that. Settle this or I will."

The fact was that the teacher, in reprimanding Philip, had said that his behavior tended to retard the progress of the entire class and was just as detrimental as the rubber-block or brake of a wagon would be if applied when the vehicle was being pulled up grade.

A few evenings ago a certain supervising principal of my acquaintance appeared before his P.-T.A. and made what was considered a convincing talk. In this address he ably defended the modern schools and pointed out that the old-time methods like the horse and buggy have given way to progress.

In next morning's mail, however, he received the following:

"Dear Sir: Mildred will never come to your school any more. We have been bringing her with a horse and buggy for ten years. But you say the days of the horse and buggy is past. Well we ain't got no car and can't afford it. As our way of bringing her don't suit you we will keep her to home from now on."

In Quest of Patriotism

LAURENCE R. CAMPBELL

THE school in any civilization is a transition process in which one generation attempts to inculcate into the next a loyalty to the national philosophy which thus far has been the directive force in its social evolution.

Educational programs, therefore, have their genesis in the concepts considered imperative in achieving a nation's ultimate destiny. If human values are supreme, the totality and continuity of the experiences provided by the public school will not be paralleled in states which accept other values as paramount. Thus, in a democratic process of social adjustment, patriotism has a significance unappreciated in dictatorships.

Administrators of America's public schools, with other pioneers on the educational frontiers, should be definitely concerned with the nature of the patriotism which determines social policy. Although they may be experts in financial administration and plant management, in personnel guidance and public relations, their fundamental interest should be in establishing an educative process from which adolescents may emerge with integrated, socialized personalities, ready to adjust happily and effectively to the shifting realities of our changing world.

Principals attempting to discover the requisites of patriotism will find many pressure groups prepared to offer their favorite formulas. So eager are some of them, whether sinister or sincere, to indoctrinate the present and coming generation that they employ tactics that they condemn in Italy, Germany and Russia.

An objective appraisal of formulas frequently proposed reveals that many are concerned not with patriotism but with traditional or popular means of expressing it. One becomes loyal by swearing his allegiance or saluting the flag, singing the national anthem or celebrating a national holiday, venerating the makers of the organic law or worshipping those who now interpret it.

Singing the national anthem may express patriotism, but school heads must not be fooled by formulas. Loyalty must have its origin in concepts that are an integral and basic part of the national philosophy itself.

Evidence of civic literacy sometimes is supposed to depend upon disapproval of socialism, peace movements and collective bargaining.

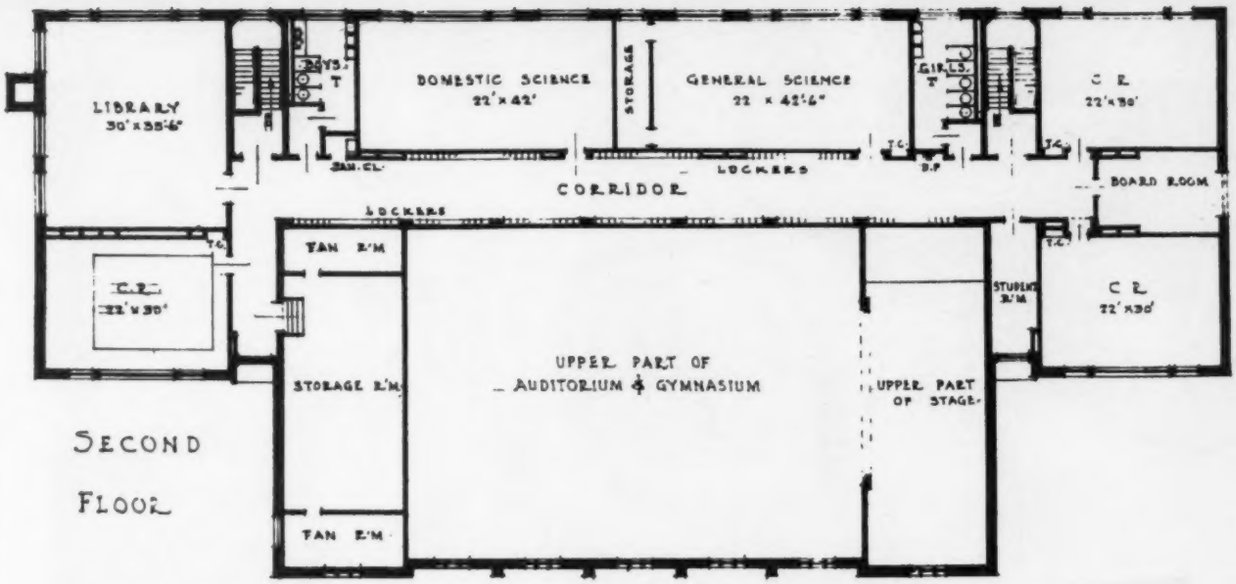
If American schools are to develop a creative citizenship, they must do more than train the next generation in matters which should be routine and voluntary. These means of expressing patriotism upon which some leaders would place emphasis are employed in dictatorships as well as in democracies. Loyalty in our republic must have its origin in concepts which are an integral part of the national philosophy itself.

The first requisite of patriotism required in the United States, but not in European nations, is social vision. Without a social conscience and a social consciousness, we can never make the pursuit of happiness more than a pursuit. An educational program is futile if it has no interest in the better society in which civil liberty and social justice, economic security and industrial democracy are realities rather than dreams. Schools must train the youth of the nation not only to face but to surmount obstacles which retard the establishment of a truly democratic state.

Social vision is not enough, for in this modern age we must have a generation trained to use the methods of science in solving political, social and economic problems. Facts must be faced, but not accepted. From the realities we may project finalities, but we can make little progress if we are unwilling to approach and to appraise our problems objectively and impersonally.

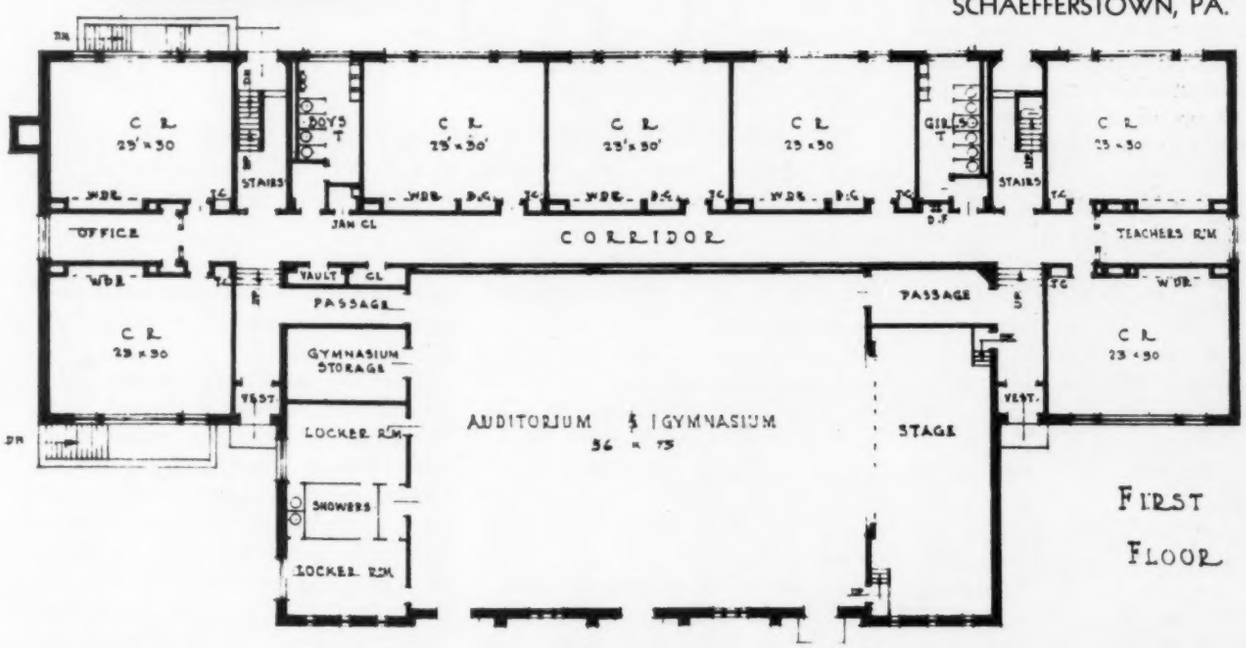
Yet social vision and scientific methods are futile unless we have the moral courage not only to see and know what is right, but to do it. This generation has a rendezvous with responsibility which may settle the world's direction for decades to come. If it lacks the adventurous spirit of earlier Americans, it may as well resign itself to the dominance of those who believe in force and violence rather than intelligence. Moral courage cannot be taught as a course in our schools but it can be the result of school experiences.

In this critical transition era public school administrators in the United States should not be deceived by substitutes for patriotism. Nor should they allow anyone to convince them that it is enough to emphasize the means of expressing loyalty. An enduring patriotism in a dynamic democracy must have its origins in fundamental attitudes and interests, in social vision, scientific approach and moral courage.



SECOND FLOOR

HEIDELBERG SCHOOL
SCHAEFFERSTOWN, PA.



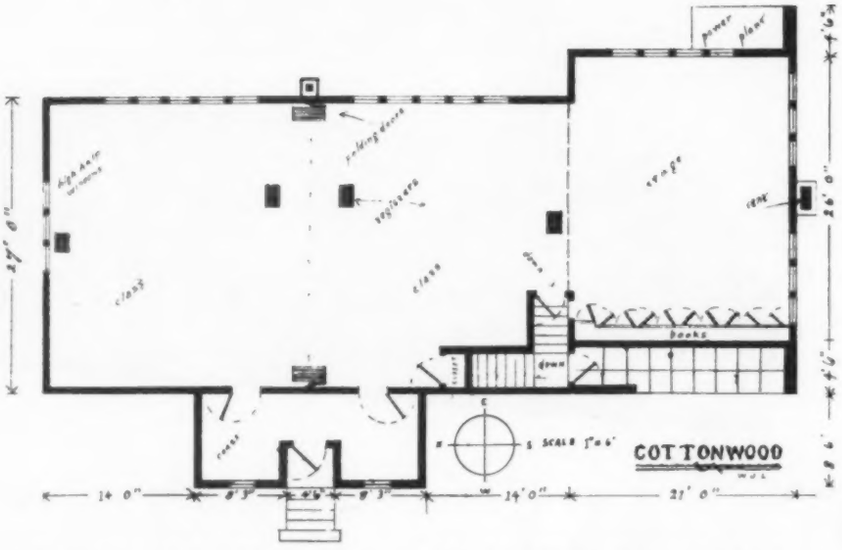
FIRST FLOOR

A PORTFOLIO OF SMALL SCHOOLS

THE SCHOOL PLANT

Cottonwood Speaks for Itself

WILLIAM LOVELACE



Floor plan of the third Cottonwood School in Blaine County, Nebraska. Of Spanish design, the building is a frame structure finished in stucco, with a full basement and insulated walls. Cost was $4000.

"WHAT a pretty school!" I have heard people exclaim as they passed my door. "In all America I have never seen a more attractive little school building."

These praises come to my ears from passers-by who have been around a bit, as it were, and they make me restless. My neighbors know me for what I am, but these esthetic strangers cannot see beyond my walls, cannot know my scope and place in the community in which I am a product of inspiration. To be sure, I am proud of my construction, for which I am noted, but it is my history that really entitles me to a position of praiseworthiness and perhaps sets me apart from other schools.

I was born in the year 1932, in Blaine County, 20 miles north of Dunning, Neb., in the heart of a great cattle range country. I inherited my name from my forefathers. The name originated from a lone cottonwood tree that stood upon the open prairie more than two score years ago.

There are no highways or paved streets in front or back of me. Millions do not pass my door to admire me as they do the massive, palatial high schools of the towns and great cities. But I give learning to American boys and girls who proudly call me "alma mater."

My genealogy includes only two brief generations before me. The original Cottonwood was a tiny "soddy," built about 40 years ago by pioneer ranchers. The ruins of her earthen walls are now only a mound of dirt indistinct on my back playground.

The second Cottonwood was a small frame building and her sides were white with real paint. She served well her days in the little community and for many years dispensed eight grades of studies to her pupils.

With the march of time, the little schoolhouse showed wear and tear. Her foundations became undermined with eroding winds and the spaces beneath her floors formed sanctuaries for wandering skunks and rabbits. The peckerwoods had bored through her rotting gables and built nests in her hair. The single door swung lower and lower on its hinges and

tne sands drifted over the worn threshold, scattering golden grains over the splintered floor. The successive wind-blown snows pounded her trembling sides, driving the children nearer and nearer the pot-bellied stove.

Withal, the school carried on and two high school grades were eventually added to it. As conditions changed and the population grew in numbers, more and more children knocked on her door. The little schoolhouse literally bulged from her heavy burden. Something had to be done!

The board held a meeting. Its members discussed the local situation thoroughly, giving special emphasis to the adverse conditions confronting the existent children eligible for high school who lived distances up to 10 miles in all directions.

The board realized that a terrific depression had swept the land. Banks throughout the sandhill country of

The second Cottonwood School was a squat frame building similar to scores of others.

Nebraska had died like flies, their liquidated assets paying only a few cents on the dollar. Well-to-do ranchers found themselves nearly penniless. Millions of beef consumers had lost their purchasing power and the price of cattle had dropped lower and lower. The parents were unable to send their children to the towns where there were high schools. The board realized that these children must be educated now, if ever.

So, in a little dark schoolroom, among these cattle-raising board members, the construction of Cottonwood III was visualized. I would be built large enough to accommodate all the children; strong enough to withstand the winds and hail, and warm enough to defy Nebraska

The original Cottonwood, taken about 1910, eight years after it was built. Sod shacks like this were the home of many of the settlers.

winters. My walls would be of stucco so that licking prairie fires would not annoy me. Plenty of windows would let in sunshine.

But how would they pay the bills?

They would issue warrants that could be sold for cash. The warrants would be paid by levying high school tuition upon the counties having school districts that would send pupils to me. It was simple! The sandhill children would get an education in spite of a world in despair!

A district meeting was held and every voter cast a cooperating ballot.

In July 1932, the first spadeful of soil was scooped from my basement. Careful calculation of material, its transportation, and labor was necessary in order that the board might achieve its objective and still be within its financial limitation. The work was given to a local contractor. He selected his labor from the ranks of the needy, honest and hard-working people, and all worked unstintingly and conscientiously throughout the hot summer months.

Early in September I was ready for business. In this premier term I had some forty pupils who came from four corners of four counties. They came in cars and in buckboards. on horseback and on foot. Several rode their horses for a distance of 10 miles. Many walked 4 miles or more. In this country it is not uncommon for tiny children to walk several miles to and from school. You may see them almost any blustery day, bucking the wind or the snow. Sometimes they are forced to back against the storm but generally they face it and get the trip over.

In the summer of 1934, the worst drought in American history ravaged the western land. The range parched to a light tan and the poorest of the cattle died on their feet searching for morsels of toasted grass. Hot winds swept off the fields the virgin soils and left ghost crops in the wake. The courageous mothers gleaned

Pupils come from the four corners of four adjacent counties.

Windows are placed so that classrooms receive east light. Sliding doors divide the main room and the trim is yellow pine, stained gray. In the basement are a classroom, playroom and dressing room.

everything from their dried-up gardens in desperate efforts to salvage enough vegetables to take their families through the bleak winter ahead.

The government bought the starving cattle, to put them out of their misery or to ship them to other countries. Gaunt herds could be seen daily on their wobbling trek to the railroad. Hard-working ranchers were reduced to poverty and were forced to ask for government rations. They revolted at the idea of a dole and asked for honest work. The scene on every hand was devastating.

In the face of all these things, the board kept the pace it had set. It did more. Another special meeting was held and an annex, consisting of an auditorium and basement gymnasium was voted. For a partial cost of these improvements we are indebted to the federal government which paid for a part of the labor through the P.W.A. The board gave much work to needy people outside of the P.W.A., who graded the premises and built a basket ball court.

I am now 6 years of age. In these six years I have been hostess to many diversified assemblages: dramatic contests, musical contests, plays, dances, wedding dinners, birthday dinners, literaries, Thanksgiving dinners, Christmas festivals, church, Sunday school, soil conservation, grange and farmers' union meetings.

In these six years I have seen many families move into our district, build temporary sod houses in which to live through the school term and depart with the close of school.

We have charged no rentals for any organization or gathering of people with the exception of dances and plays. The dances have paid nearly $2000. They have paid for a light plant, piano, desks, chairs, books, repairs and for miscellaneous expenses. For more than a year local musicians furnished free music. For six years local women have donated their services in preparing and serving luncheons and dinners for community gatherings.

The board members have a cigar box in which they keep the money from the dances. They have used the box many times in the regular routine of my business, at times when the balance on the treasurer's books was sadly in need of replenishment.

Please do not mistake me for a consolidated high school. I am in district 23, which has never paid more than $1100 annually into my treasury. I have no endowments other than the honest labor and devotion of my people.

My boys have won many banners and plaques on the athletic field. One was given to them by the state's schools for winning more points, per capita, than any other school in Nebraska in 1937. My boys and girls have many times distinguished themselves in the county dramatic and musical festivals.

I have been blessed with the best instructors obtainable for the salaries we could afford to pay. They have cooperated pridefully and conscientiously with the pupils, their parents and the board.

If you would like a description of me, this is one that has been prepared by a friend:

"The Cottonwood schoolhouse measures 68 by 26 feet inside, in the main, in addition to an 8 by 20 foot dressing room. The building has a full basement. There are three classrooms—one in the basement—stage or library, gymnasium, furnace and children's playroom, coal room, dressing room and power plant room.

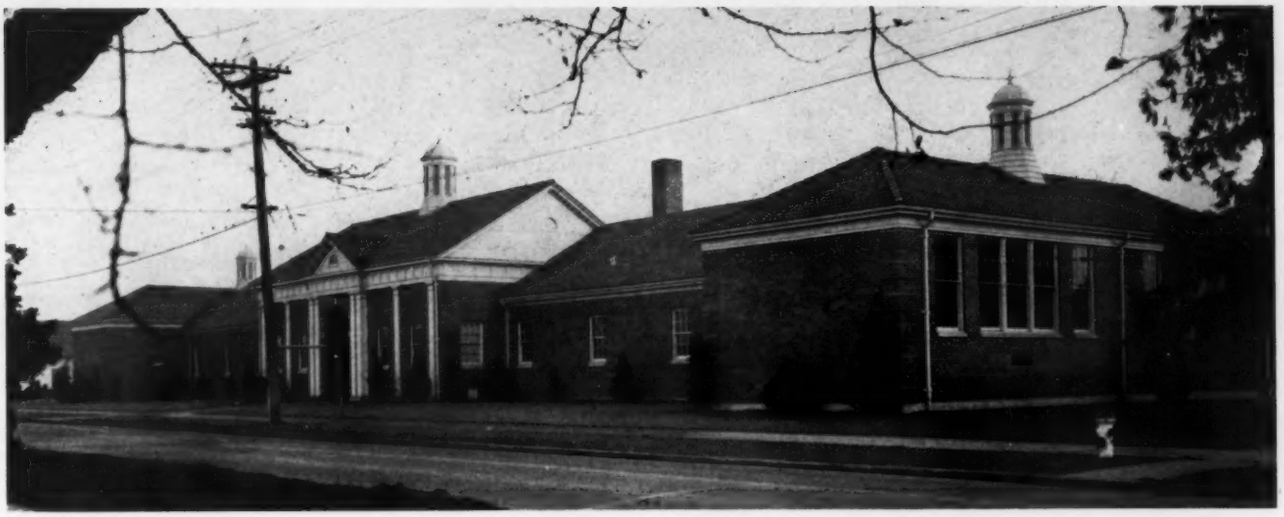
"The building is a frame structure. The walls are insulated on the inside with tile designed insulation. The outer walls are constructed of sheeting laid diagonally, waterproofed stormpaper, two layers of galvanized steel squirrel wire and three coats of cement stucco. The finish coat of stucco has a buff-colored, oak bark texture.

"The floors are double and finished in red oak. In the middle of the main floor are folding, sliding doors, which turn the two rooms into one when opened. The trim in all rooms is yellow pine, stained satin gray. The shingled roof is painted red. All rooms are heated with a hot air, pipe furnace.

"We built the schoolhouse in the Spanish design for two reasons: to conserve material and because Spanish architecture can be made warmer than most other types of structures. The stormpaper runs continuously from the foundation to the comb of the roof, including the eaves and the turns on the 'fire wall' designed gables. The framework starts at the ground level.

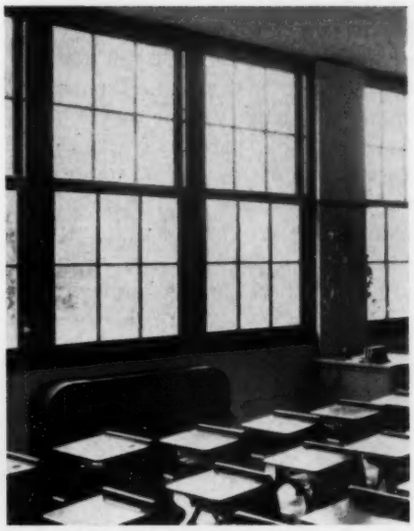
"The main floor rests on a ribband mortised into the studding, like the second story of an ordinary dwelling. This arrangement made it possible to have insulated dry, subbasement walls. The lower part of the outside walls is stuccoed to represent stone laid in mortar. The roof of the annex is of built-up asphalt. The outside cornice is reduced to the minimum and is chiefly of stucco.

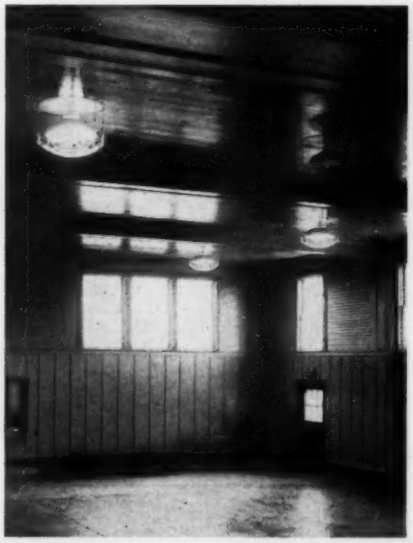
"The cost of the entire building was a little less than $4000, notwithstanding the fact that the materials were transported from the railroad and in some instances from the Black Hills of South Dakota and from Omaha, the latter two points being 300 miles away."



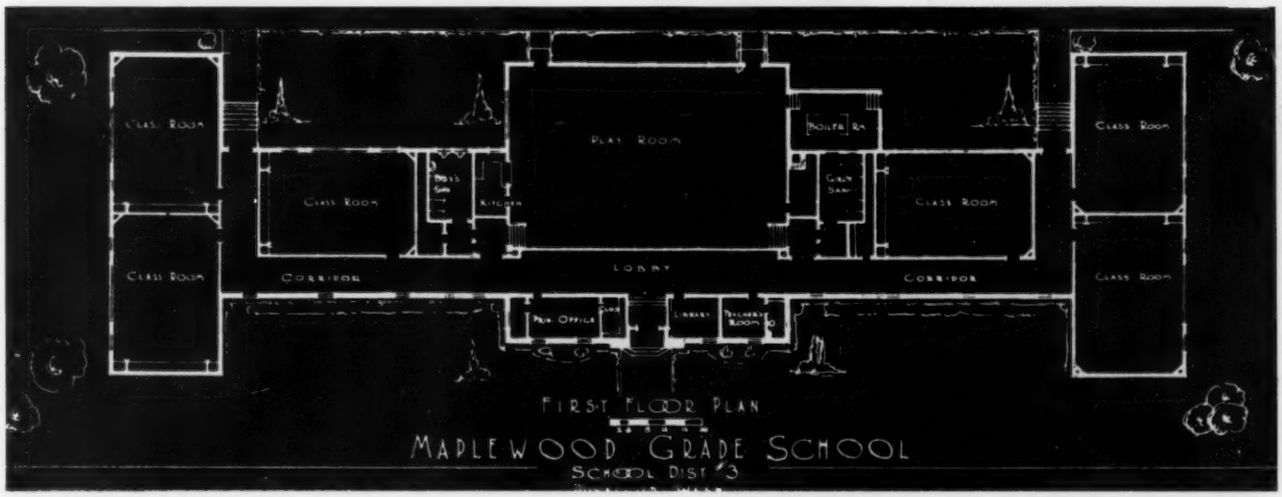
Sheltered From Traffic

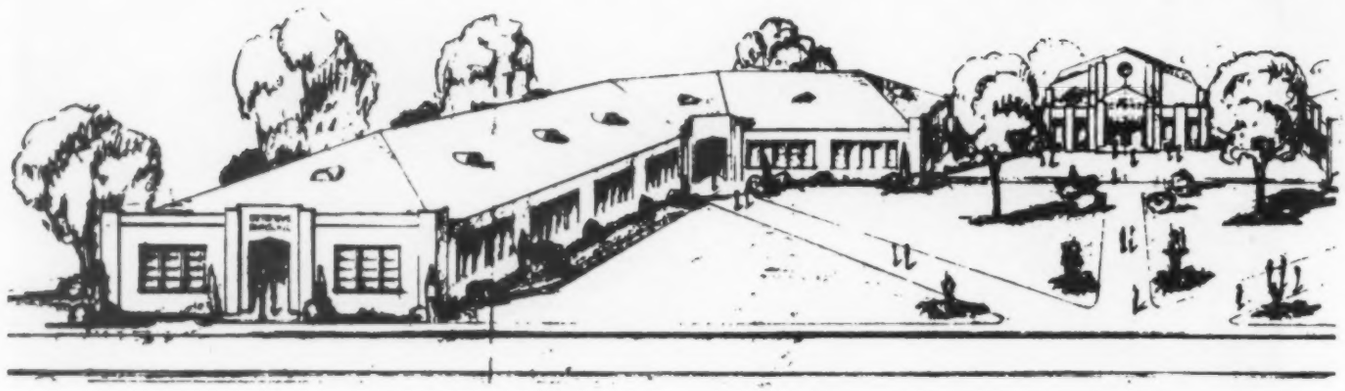
Design of the Maplewood Grade School, Puyallup, Wash., was influenced by a small lot and by the fact that a thoroughfare runs in front of the building. By extending the building across the entire width of the property, the playfield is sheltered from traffic. Classrooms are placed at the rear to minimize street noises. The school contains six classrooms and a playroom, a principal's office, teachers' room, book room, kitchen, boiler room and storeroom. As designed by Mock and Morrison, Tacoma architects, the cost was $41,000. Walls are solid masonry and the roof is tile with copper flashings. Maple floors are used throughout the classrooms.





Air conditioning units in classrooms (above) provide a uniform temperature throughout the year. Note that walls are painted up to 7 feet. The area above the dado and the ceiling are treated with washable calcimine. Left: Folding wardrobes save space and are fitted with blackboards and chalk rails. The playroom (center) boasts a portable stage and also has facilities for games.





One Story School in

RALPH BODMAN

JANITORS, elementary and high school teachers, athletic directors, principals and superintendents, all contributed ideas to the design and construction of the new Dutchtown school plant in Ascension Parish, Louisiana. The points of view of janitors and maintenance men were recognized as helpful in coping with the problems of heating, sanitation and maintenance.

Dutchtown's major school building, a frame structure, was destroyed by a disastrous fire in 1934.

The community obviously needed a meeting place, like the old town halls of New England. Besides classrooms, a library and laboratories, an auditorium-gymnasium also was planned.

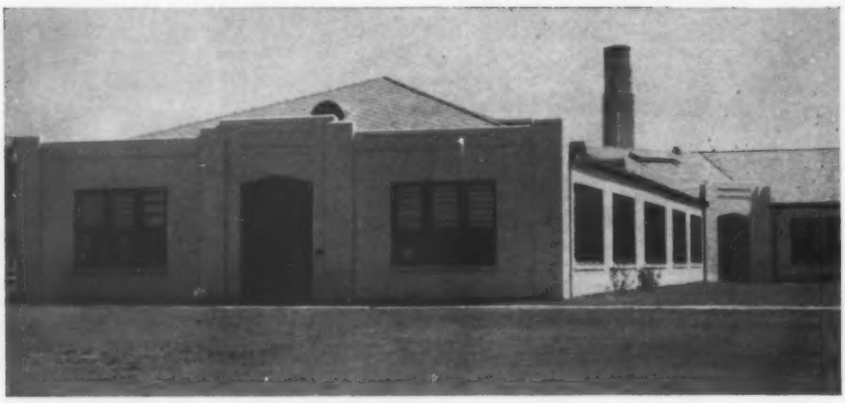
Since local funds were insufficient to finance the project, financial aid was obtained from the W.P.A. This meant that the plant had to be constructed almost entirely with unskilled labor. There was ample labor of this type available from the W.P.A. relief rolls, but bricklayers, carpenters and plasterers were not to be had. The problem, then, was how to include the features recommended by the various school people in the construction of the plant and yet do the job with unskilled labor at a minimum cost.

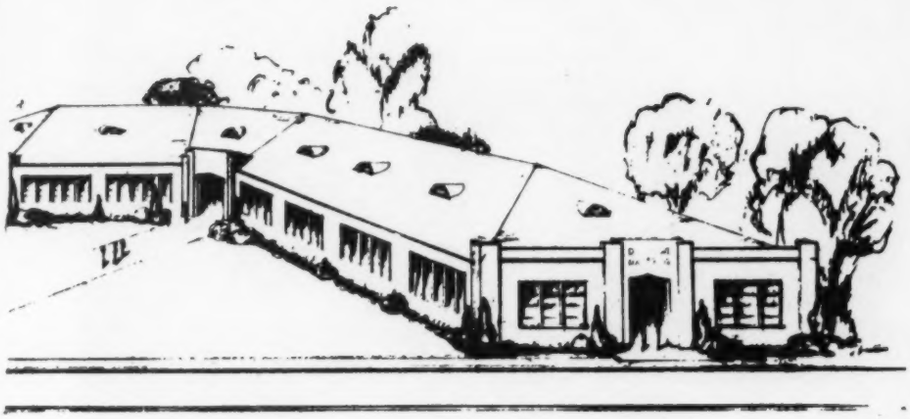
Construction of the exterior walls was the first major problem. The average school building in Louisiana has exterior walls of 12 inch brick, requiring skilled brick masons to construct. Their services were out of the question. Sand and gravel were available locally and patented steel forms could be obtained at a nominal rental. Concrete walls erected by this method could be constructed by common labor.

The only treatment that the concrete walls required was hand rubbing with an abrasive that produced a texture similar to limestone and lightened the color of the concrete to an oyster white.

Another perplexing problem was the height of the finished floor above the ground. Floors of most school buildings in this vicinity are raised 3 feet or more from the ground. This space is necessary to keep the wood framing from contact with the earth and to provide space for easy access to plumbing.

Obviously, if these two important considerations could be satisfied in some manner so that the flooring might be lowered, then money would be saved, unnecessary trudging up and down steps eliminated and a definite fire hazard removed.





Dutchtown, La.

A raised building creates a dead air space beneath the floor with the possibility of explosion from gas, as occurred in the New London disaster in Texas.

A solution to this problem was found: By substituting earth fill and a 4 inch concrete slab for the brick piers and wood joists, the floor height above the ground level was reduced to 2 feet or less.

All plumbing and steam return lines that would run normally under the building were routed through terra cotta pipe below the ground just outside the building line where they are readily accessible for inspection or necessary repairs.

The interior partitions, ceiling and roof framing are of conventional wood framing. Following the suggestion from the school people consulted, a wainscot that does not soil easily or show pencil marks was used. This was achieved by using throughout a 4 foot wainscot of pressed wood wall boards which neither shows dirt nor requires treatment other than waxing. The walls and ceilings above the wainscot are of light colored insulation board, requiring no painting.

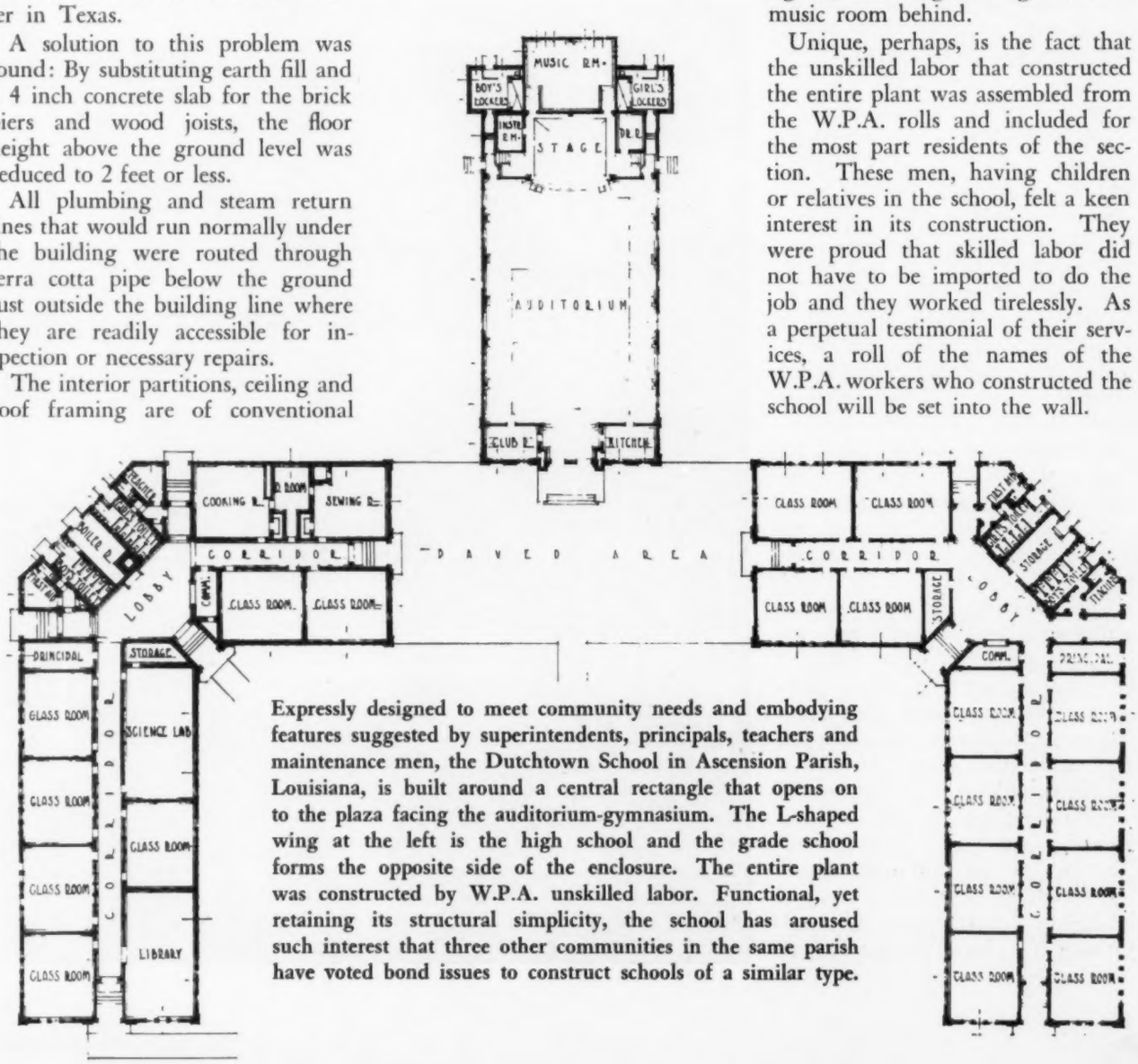
Dimensions of Dutchtown School

High school	14,250 sq. ft.	320,450 cu. ft.
Elementary school	14,250 sq. ft.	320,450 cu. ft.
Auditorium	8,150 sq. ft.	201,970 cu. ft.
Totals *	36,650 sq. ft.	842,870 cu. ft.

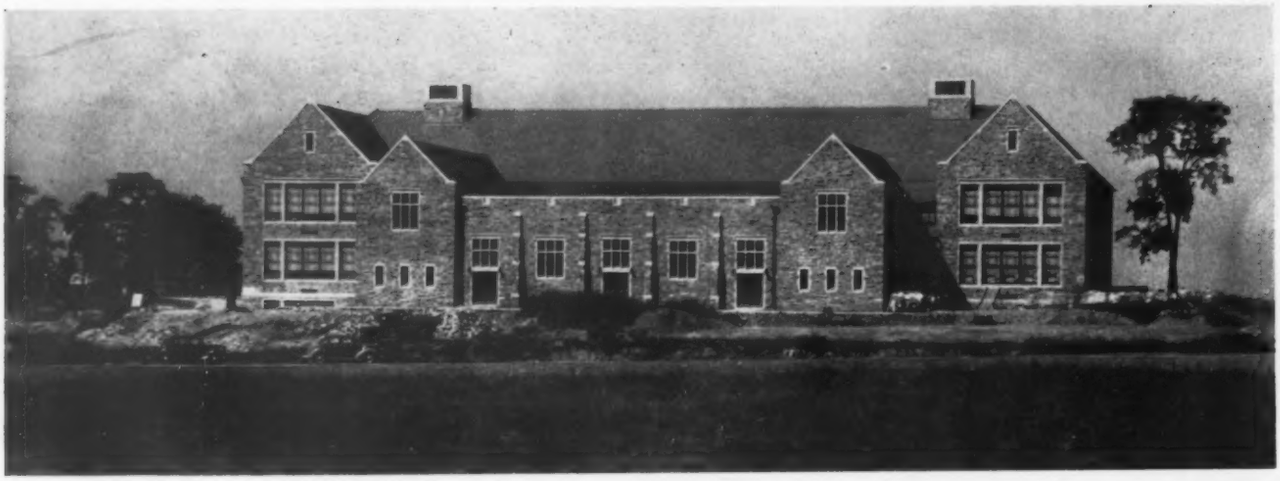
* The total cost of the project was $135,000, including landscaping, plumbing, heating, electrical work and architects' fees. The unit cost was $3.68 per square foot, or 16 cents per cubic foot.

The next problem was to incorporate the features of an indoor playground, gymnasium, stage and music room into one unit. The auditorium-gymnasium was then designed, featuring a stage with a music room behind.

Unique, perhaps, is the fact that the unskilled labor that constructed the entire plant was assembled from the W.P.A. rolls and included for the most part residents of the section. These men, having children or relatives in the school, felt a keen interest in its construction. They were proud that skilled labor did not have to be imported to do the job and they worked tirelessly. As a perpetual testimonial of their services, a roll of the names of the W.P.A. workers who constructed the school will be set into the wall.



Expressly designed to meet community needs and embodying features suggested by superintendents, principals, teachers and maintenance men, the Dutchtown School in Ascension Parish, Louisiana, is built around a central rectangle that opens on to the plaza facing the auditorium-gymnasium. The L-shaped wing at the left is the high school and the grade school forms the opposite side of the enclosure. The entire plant was constructed by W.P.A. unskilled labor. Functional, yet retaining its structural simplicity, the school has aroused such interest that three other communities in the same parish have voted bond issues to construct schools of a similar type.



Old Heidelberg Now New

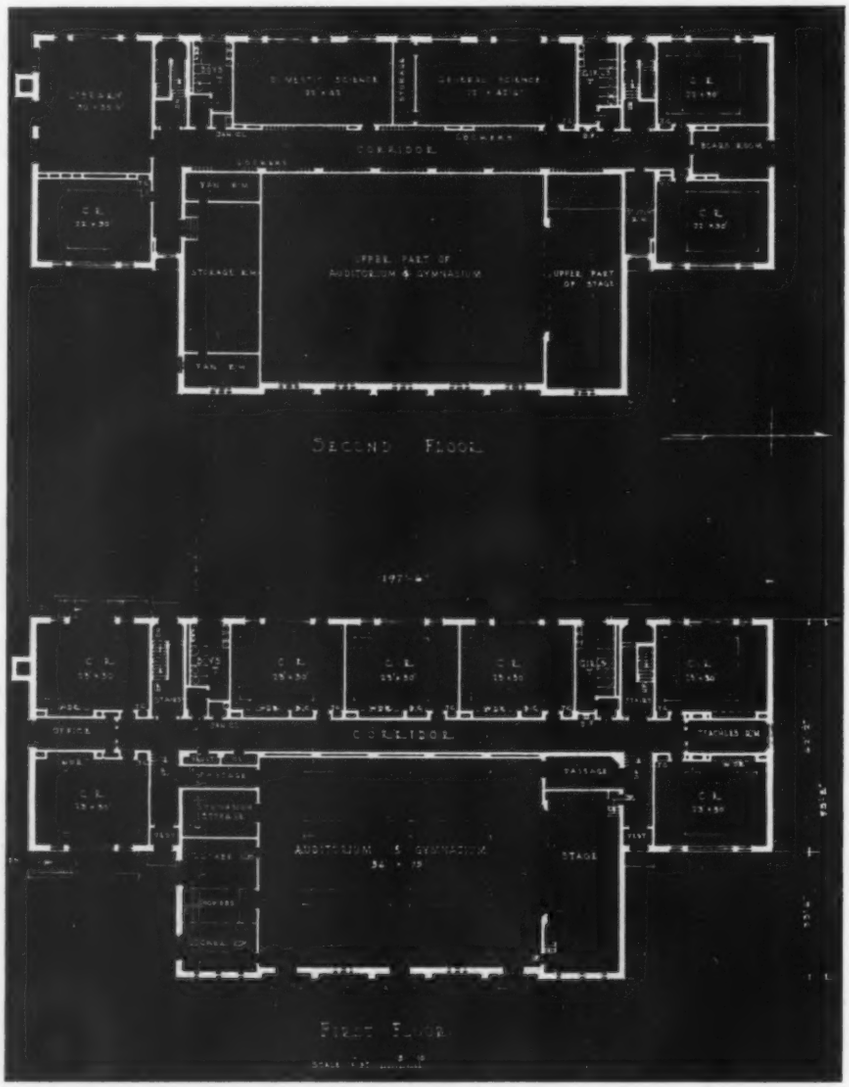
HARRY C. MAYER

SCHAEFFERSTOWN, in agriculturally rich Lebanon County, was formerly Heidelberg, named for Heidelberg in Germany, the homeland of its early settlers. It is one of the oldest typical German towns in southeastern Pennsylvania. Its early log schoolhouses and their successors were finally replaced with a "modern" school building in 1883, at the time said to be one of the finest in the county.

Because the building was inadequate and out of date, because the people were aware of the need to "modernize" and because the Public Works Administration offered financial aid, the board of directors submitted all the facts to the public for consideration and study. "Shall we build a new school?" was the question. At the general election, held in November 1935, the voters answered by deciding overwhelmingly in favor of the project.

After studying the needs of the community, both present and anticipated, and the financial ability of the school district, preliminary plans for the building were developed. This was a cooperative piece of work between architect, local authorities and the Pennsylvania Department of Public Instruction. It took into consideration initial cost, adequacy, efficiency of operation and future needs.

The architect estimated the cost of the building at $125,000. After advertising for bids, contracts were



The library occupies a corner of the second floor, which is designed for high school use. The science room is equipped with newest type laboratory desks.

awarded as follows: general construction, $84,960; plumbing, $5670; heating and ventilating, $14,285; electrical work, $5650; total, $110,565. The original estimate was almost sufficient to cover the cost of the entire project, including equipment, grading and landscaping. Of this amount, P.W.A. granted $56,250, which was 45 per cent of the cost. The balance was raised by a bond issue sold to local banks.

The school, Gothic in design, is beautifully situated on a hill overlooking the town and the wooded hills to the south. Adjoining the 5-acre site are 14 additional acres of public ground available for playground. This entire plot is being developed as a recreational center for the community and will provide an athletic field for school activities and a public playground.

The building is 198 feet long and 96 feet wide. The exterior walls are of first quality local blue limestone, laid broken range, hammer dressed and square-jointed, with cast stone trim for windows and doors. This type of construction harmonizes with the many solidly built stone structures to be found in and about Schaefferstown. The cast stone is similar in texture and appearance to Indiana limestone. The front elevation features a combination auditorium-gymnasium and entrances to classrooms.

The roof is covered with the best quality blue-black Pennsylvania slate; the flat part over the auditorium, with asphalt composition. Floors are of concrete on steel joist construction, supporting hollow tile furring and partition walls between classrooms. On the first floor there are seven standard size classrooms, office, teachers' room and toilet rooms. Adjoining the gymnasium are shower and locker rooms for boys and girls, storage room for gymnasium equipment, book storage room and special vault room. The building has its own power system.

At one end of the gymnasium is a large stage for the occasions when the gymnasium is to be used as an auditorium. The seating capacity of the auditorium is 600, which is ample for school assemblies as well as for concerts, plays and community meetings of all kinds.

The second floor is designed exclusively for high school use and provides three standard size classrooms, library, special rooms for science, home economics, teachers, storage and toilet usage. The basement contains boiler room, recreation room and storage space.

Interior walls are plastered and painted. All floors are asphalt tile, except the floor in the auditorium, which is clear hard maple. All classrooms have built-in steel storage cabinets. Wardrobes are provided in the first floor rooms and built-in steel lockers in the second floor corridor. All rooms have ample blackboard and corkboard space. Windows are the steel casement type.

An adequate heating and ventilating system controls the temperature and fresh air supply for all spaces. The classrooms are provided with ventilating units with motor and fan combinations. The units for the auditorium-gymnasium are the ceiling type with electric automatic temperature control. All plumbing fixtures are of best grade, standard manufacture. Hot water is provided by means of a hot water generator with ample capacity for the school at all times.

Simple Lines in South Dakota

O. K. THOLLEHAUG

THE exterior of the Sisseton Public School, Sisseton, S. D., shows a tendency toward modern lines, marked by simplicity and dignity. No money has been spent in needless frills. Although the arrangement of the building was determined functionally, the general plan is characterized by symmetry and harmony.

The school is a combination grade and high school building designed to meet all the educational needs of a community in which nearly one-third of the enrollment comes from the farm. Nine regular classrooms on the first floor provide for the pupils enrolled in grades below the ninth. The superintendent's office on the right side of the main entrance consists of two main office rooms, a supply room and a vault. A teachers' rest room and a large sound-treated music room with two private practice rooms also are on the first floor. The music room, which is designed especially for band, orchestra and choral work, is near an outside entrance and is directly across the corridor from the auditorium. This location is convenient for evening rehearsals and evening appearances of music groups.

In general the building has been carefully planned to meet the activity program of modern education. The gymnasium with its roomy, well-lighted and well-ventilated dressing rooms and showers for boys and girls ranks among the best, and the equipment for laboratory work and for the various vocational courses is unusually complete. The classrooms are well adapted to their specific purposes.

The gymnasium-auditorium is on the level of the first floor and constitutes one wing of the building. It has been made readily accessible for community functions. Entrances have been placed so that daytime meetings will not disturb the regular class work. When gatherings are held in the evening, holding gates may be used to shut off the corridors leading to grade and high school classrooms. For evening gymnasium practice, direct access to the gymnasium and the dressing rooms is provided while the other part of the building is closed.

A dual system of temperature control enables the custodian to keep the gymnasium-auditorium at a lower or higher temperature than the rest of the building, as the need varies. This feature is definitely in the interest of economy.

The gymnasium floor is 50 by 80 feet. The seating used in connection with the games parallels the gymnasium floor; the view is not obstructed by posts or supports. On the first rows are enough opera chairs to accommodate the average attendance at games. The full seating capacity, when the floor is being used for games, is approximately 1000. By the use of folding chairs, the gymnasium can be converted into an auditorium large enough for any community gathering.

Combination grade and high school at Sisseton, S. D., erected at a cost of $225,000. Architects Hugill and Blatherwick, Sioux Falls, designed the building.

A spacious stage at one end of the gymnasium-auditorium is liberally provided with concert and cyclorama curtains and all the necessary lighting equipment for programs and dramatic productions. Property rooms and several dressing rooms add to the convenience.

On one side of the auditorium is a kitchen equipped for serving banquets to as many as 150 people.

The second floor provides ten regular high school classrooms of varying sizes, in addition to a study hall, library, principal's office, a number of storerooms and a projection booth.

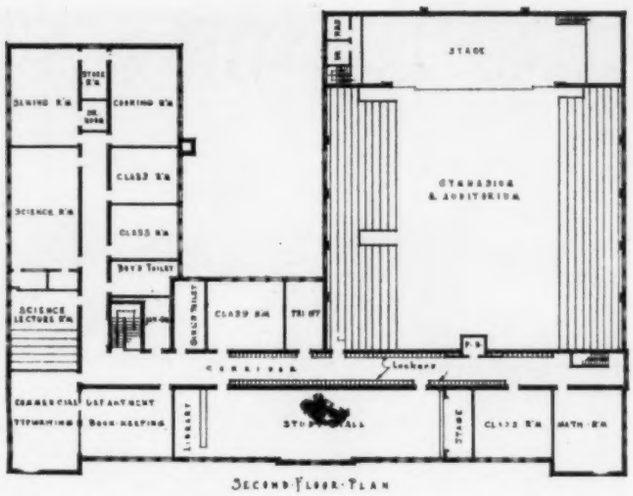
The homeroom plan of organization obviates the necessity of a large study or special assembly. A door directly across from the study hall

on the second floor level leads to the elevated seats of the auditorium where high school assemblies are held. Reference books are kept in the study hall or in the homerooms. Fiction owned by the school is in the city Carnegie library so that the pupils may have access to it in the evenings. This arrangement of study hall, library and auditorium cuts down materially the amount of room and equipment needed for the activities involved and is most economical in its demand upon teacher time.

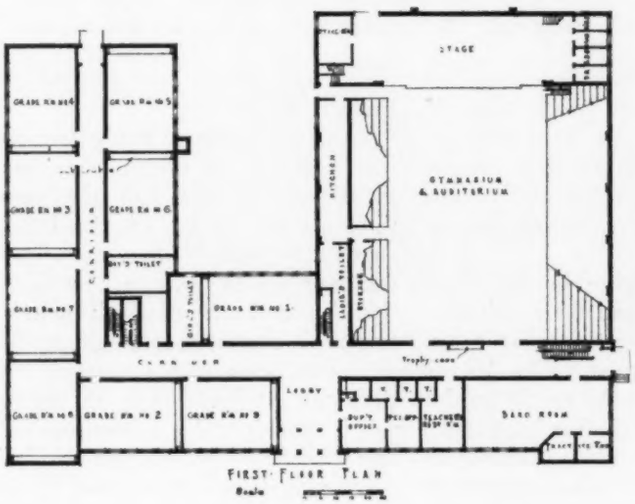
Provisions made for the teaching of science also attempt to avoid unnecessary duplication of rooms and equipment. Only one room is completely equipped for laboratory work in science but an adjoining room is provided with water, gas and electricity for demonstration purposes. By careful planning of the program, the combination laboratory gives the various classes the needed time in laboratory work and actually doubles the return on the investment made in room and equipment without any appreciable loss in teaching efficiency.

A homemaking department, consisting of a foods laboratory, a sewing room, a fitting room and a storeroom with an ample supply of built-in cabinets, is one of the best equipped and most attractive departments in the building. Here, too, the idea of multiple use has been employed.

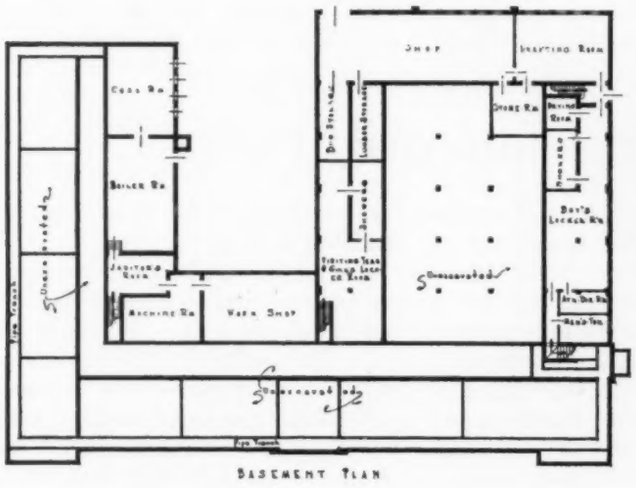
A dual-purpose room adjoining the kitchen can quickly be set for serving small groups. This function seldom interferes with its other uses.



Second floor classrooms are conveniently arranged for pupils in the high school.



Grade rooms are on the first floor. The gymnasium-auditorium extends two full stories.



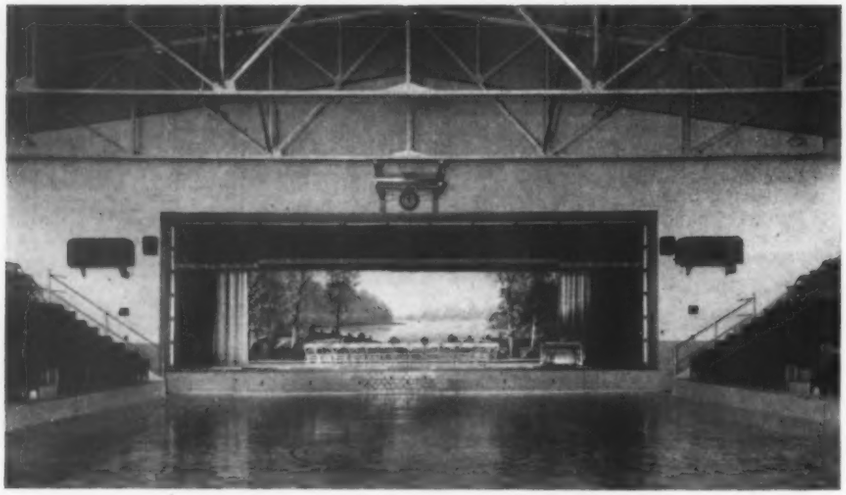
Showers and locker rooms, the drafting room and shop, machine and boiler rooms are in the basement.

The arrangement in the foods laboratory follows the unit plan and provides equipment so that six groups of four may work at once.

Two large rooms have been assigned exclusively to the commercial department, which is one of the most popular in the school. Individual tables have been provided for both typing and bookkeeping. By use of a glass partition between the rooms, the pupils in one room may continue typing practice while the teacher conducts classes in the other room.

Classes in agriculture and shop work are conducted in basement rooms that are entirely above ground. A regular classroom, a finishing room, a storeroom and a bus room adjoin the shop. At one end is a large overhead door that enables the boys in farm mechanics to work on farm machinery, tractors and cars within the shop.

In the selection of interior appointments and mechanical equipment, utmost care was exercised to avoid the sacrifice of quality to price. All materials were checked carefully with reference to specific



Placed on the first floor level, the auditorium-gymnasium is readily accessible for community meetings. A well-equipped service kitchen adjoins.

function, convenience, flexibility and attractiveness. The wood trim is of quartersawed oak, except in the furnace room and the shop rooms. In the corridors, stairs and toilets, the floors and wainscoting are of terrazzo.

The floor covering in the classrooms of the second floor is battleship linoleum, terra cotta in color. This covering is quiet, easily cleaned and attractive. In the rooms on the first floor, asphalt tile has been used, except in the auditorium-gymnasium where investigation and experience favored the use of maple tile. Sound-absorbing, noise-correcting tile on the ceilings of classrooms, corridors and the auditorium has made the building a pleasant, quiet place in which to work.

The building is heated with a stoker-fed low-pressure boiler which has sufficient capacity for additional rooms, should they ever be required. All classrooms have unit ventilators with complete automatic temperature controls of the pneumatic type. The heating-ventilating units all have a capacity of at least 1400 cubic feet per minute. Outside air is heated to a temperature of 60°F. or more before it enters the room, thereby greatly reducing the sensation of draft resulting from moving currents of air. A dual temperature control makes it easy to vary the temperature from room to room and to keep the entire building at a lower temperature at night. Considerable fuel economy results from this arrangement in a location in which winters are long and the climate is severe.

The extensive new equipment for the teaching of the sciences and vocational subjects and the completeness of the list of visual aids constitute possibly the most outstanding features of the new facilities. A sound system, which includes two radio channels, microphones for announcements and for stage amplification, transmission of phonograph records and a supervisory system with return speech, was installed.

Individual lockers, recessed in the walls, line the corridors of the high school and provide separate locker space for all high school pupils. The lockers have the best available master-keyed combination locks. Each grade room has in-built steel wardrobes in the rear, which are provided with unit teacher control and lock. Slate blackboards and cork bulletin boards have been provided in ample measure.

Factors of health and economy in maintenance have been the determining principles in the solution of many problems. The effect of the surroundings upon mental and physical well-being cannot be questioned and their importance becomes more impressive when one considers that the average high school pupil spends, before graduation, approximately 13,000 hours in the school building. Light, air, temperature, sound and color make definite contributions. The materials used in the building itself, the type of construction and the equipment selected indicate that these factors were considered.

The cost of the building did not place the community in stringent financial circumstances. A bond issue of $18,000, plus insurance money and the P.W.A. grant, covered practically the entire cost of the undertaking, approximately $225,000. The building itself, including heating, plumbing, electric wiring, electric light fixtures, a sound system with speakers in all rooms, a complete installation of electric clocks and bells, window shades and all permanent fixtures, was built at a cost of 25.8 cents per cubic foot.

The building has been in use since Jan. 5, 1938.

Correcting Janitorial Flaws

WHEN the school of education of the University of Pennsylvania made a recent survey of the schools of Bethlehem, Pa., it pointed out some flaws in the organization of the janitorial personnel.

Chief among these were (1) that janitors were appointed upon recommendation of the engineer of buildings and grounds; (2) that the merit system was not employed in selecting the best applications; (3) that members of the janitorial staff, on the average, were too old, and (4) that there was no adequate salary schedule in effect.

The survey went on to suggest six recommendations for improving janitorial personnel:

1. That janitors be appointed upon recommendation of the superintendent of schools.
2. That a merit system be employed in selecting janitors.
3. That the maximum age at which an individual may enter the service be lowered from 59 to 44.
4. That in-service training be provided for the janitors.
5. That standards controlling assignment and load of the janitors be established.
6. That a salary schedule be adopted and adhered to.

Facts on Insurance

HARLIE GARVER

THE appraisal of school property as a primary essential in a sound insurance procedure already has been reviewed. Three other requisites now present themselves for consideration: (1) adequate coverage for fire, windstorm and other losses at the lowest possible rates; (2) proper distribution of policies and premium dates, together with complete records of all transactions; (3) frequent inspections, with elimination of all unnecessary charges resulting from remediable hazards.

No one who contemplates adequate coverage of school property could set in motion a program of protection without considering the relative merits of flat rate insurance and coinsurance. Probably the school official who decides upon flat rate, or ordinary, insurance reasons that the average fire loss is relatively small compared to the value of the property. Furthermore, school buildings, contrary to general belief, are good risks when compared to mercantile or factory buildings.

Thus fortified, he insures the building for perhaps 40 per cent of its sound insurable value. He is willing to risk a possible 60 per cent loss in case of total destruction of a building in order to save on the yearly premiums.

Shall It Be Coinsurance?

However, it is this reasoning that makes coinsurance possible. The insurance companies reason thus: Average losses are small and, likewise, most coverages are for only a small proportion of the value of the property. Therefore, the person who insures for an amount comparable to the actual value of the property should be able to do so at a reduced rate and the larger the proportion of insurance carried the lower his rate should be.

To be specific, let us consider the following schedule of percentage credits for coinsurance in one state to be applied to the basic rate.

Schedule of Percentage Credits for Coinsurance in One State

Deduction From Scheduled Rate for	*70% Clause*		*80% Clause*		*90% Clause*	
	Bldg.	*Contents*	*Bldg.*	*Contents*	*Bldg.*	*Contents*
1. Fireproof construction	66⅔%	45%	70%	50%	73%	55%
2. Brick, stone, concrete (not fireproof)	20%	None	25%	15%	30%	20%
3. Frame	None	None	10%	10%	15%	15%

It will be even clearer if we use an example. A building of ordinary brick construction — No. 2 above — insured for 40 per cent of its value carries a basic fire insurance rate of 60 cents. If the building is valued at $100,000, the original $40,000 of flat rate insurance will cost $240. If the same building is insured for 80 per cent of its value under the coinsurance clause the rate will be reduced 25 per cent to 45 cents. The premium will then be $360 for $80,000 of insurance. Thus an additional outlay of $120 secures $40,000 more insurance. The 100 per cent of additional insurance then costs only 50 per cent more.

This illustration is particularly apt because school buildings usually come in the class mentioned and most school districts that use coinsurance do so under the 80 per cent clause. The reason for the latter circumstance is that 80 per cent coinsurance seems to offer the maximum of protection at a minimum premium. In coinsurance below 80 per cent of value the reductions are not sufficient to warrant the added risk of under-insurance; in 90 per cent coinsurance the reduction in rate is too small to justify the added premiums, even though 10 per cent more protection is obtained.

However, there is a catch in this scheme, for at this point we discover the reason for the term "coinsurance." One naturally asks what happens when the insured, through carelessness or ignorance, or in order to obtain a reduced rate, insures for an amount less than the percentage expressed in his contract. The answer is that because he has insured for less than the agreed percentage the insurance company is therefore deprived of a proportionate premium. In that case he becomes a coinsurer with the company and must share the loss in the same proportion that his coverage failed to meet the agreed figure.

It will be seen that this part of the contract penalizes the insured only when both the insurance and the loss are less than the fixed percentage. The table below clarifies this.

Examples Using 80 Per Cent Clause

Value	*Insurance*	*Loss*	*Insurance Pays*
$10,000	$8000	$6000	$6000
10,000	8000	8000	8000
10,000	8000	9000	8000
10,000	6000	8000	6000

In the last example above, although the insurance is only three-fourths of the agreed amount, the insurance still pays three-fourths of the loss, or in this case $6000. When both insurance and loss are less than 80 per cent, in a case in which the valuation is $10,000, the insurance is $6000, and the loss is $5000, the insurance pays $3750.

This case may be stated thus: Eighty per cent value is $8000. Since the insurance is $2000 less than the agreed 80 per cent, the owner is a contributor or coinsurer to that amount and contributes to the loss in that proportion. The insurance pays three-fourths of loss, or $3750, and owner contributes one-fourth, or $1250. The amount of loss is $5000.

These facts relating to coinsurance show still further the necessity for an accurate appraisal of property. The insurance company is perfectly willing to take the word of the insured that he is carrying 80 per cent. The

question arises only in case of a loss; then he must prove his case.

It is often true that school corporations make adequate provisions for fire insurance and neglect other kinds of protection. This is particularly true of windstorm insurance, chiefly because of the familiar argument that most windstorm losses are small. However true this may be, it still is not a safe policy to pursue when we consider that windstorm rates are low and that coinsurance makes them lower still. Added to this argument is the little known fact that fires often result from damage by windstorm and that fire insurance ordinarily does not cover such a loss. In fact, it is often true that the fire damage is many times the windstorm loss itself.

It likewise may be emphasized that most fire insurance policies do not cover losses by explosion, particularly those caused by gas leakage and defective boilers. Inclusion of these items in the insurance, either by supplemental contract or by separate policies, may prove an inexpensive kind of insurance in the long run.

Discussion of adequate coverage calls to mind two kinds of insurance which merit brief discussion, although it is impossible to discuss them at length. These are self-insurance and state insurance.

At least twenty cities in the United States carry their own fire insurance on public school buildings. The losses are paid either by direct taxation or from a fund set aside regularly for that purpose. The city which plans self-insurance should have a large number of widely scattered buildings; otherwise a total loss might prove a distinct hardship. Probably a city should have at least twenty-five buildings valued at three million dollars or more before such a program is contemplated.

An insurance fund for public school buildings set up by the commonwealth is now in operation in three states and under consideration in at least one other. Those promoting the idea argue that the loss ratio (ratio of losses to premiums paid) for school property does not exceed 30 per cent and that schools, therefore, help to pay the losses for other structures. Through state insurance the cost can thus be held substantially under that by privately owned companies. Thus the feasibility of state insurance from a purely economic standpoint is probably unchallenged, but opponents always question the fairness of the state's assumption of business functions now performed satisfactorily in private hands. Such a controversial question is, however, outside the scope of this article.

Of distinct importance, likewise, are certain considerations related to the proper distribution of policies and premium dates and to adequate information concerning them.

Generally speaking, it is better to carry a moderate amount of insurance in a number of companies than to place the insurance with one or two. The reason is that an otherwise financially sound concern, suddenly hit by several total losses upon which large policies are written, may be placed in serious straits. To avoid this danger the more conservative underwriters refuse to carry any large proportion on a given building. They prefer to lose a small amount of business rather than to risk a heavy loss.

A second policy used by insurance companies to avoid a heavy loss is to engage in a practice called reinsurance. This consists in placing a certain proportion of each of the risks either with other established concerns in the same business or with companies whose sole business is reinsurance. In this way losses are distributed over a large number of concerns, so that even a widespread catastrophe in a particular locality is not likely to result seriously for the company so protected.

Obviously school officials are not directly interested in reinsurance, but at least they are wise in inquiring about it, especially in the case of concerns not long established or highly rated.

Thus we are brought to a point of vital interest: the ratings of the companies. It is probably safe to say that any school corporation which insures, we shall say, in twenty-five different companies and which has not over a period of years examined their ratings may be in a sad predicament if fire comes. A periodic examination of these ratings is a prime necessity if complete protection is to be a fact.

These ratings are published by reputable concerns which make an exhaustive study of the assets and business methods of insurance companies, and they are seldom far wrong in their judgments. Fire, windstorm and surety companies are rated A, B, C, D and E. If the sign "+" is used, it indicates that the company is above average for that group.

No exhaustive discussion of these ratings can be carried on in this article but certain fundamentals are of interest. Generally speaking, one can well question the financial security of stock companies rated below A or B, but mutual companies are penalized somewhat in the ratings because of lesser dividends accrued on policies. Consequently a mutual company may be classed C and still be financially sound.

One reliable insurance guide widely consulted over the entire country uses the following criteria in establishing its ratings: (1) good underwriting; (2) economy of management; (3) adequate reserves for undischarged liabilities; (4) adequate net resources; (5) sound investments, and (6) dividend policy.

The question of a comparison of mutual and stock companies also arises, especially since there has been a marked increase in school business written with mutual companies in

In this, the second of two articles on insurance, Mr. Garver, superintendent of schools, Union City, Ind., emphasizes the need for adequate coverage, proper distribution of policies and premium dates, and frequent inspections. In his first article, which appeared in the May issue, Mr. Garver described appraisal

late years. In general, it can be said that there is little difference in the final cost when all factors are considered. It is true that mutual companies do declare substantial dividends from year to year but stock companies offer certain inducements that serve to offset this advantage. Particularly is this true with reference to time of premium payments.

If the greatest possible economy is to be gained in the total cost of insurance, policies must be written for at least three years and preferably for five. The following scheme presents the reduction in rates for extended periods: a policy period of one year, the basic rate; a policy period of two years, 1¾ times the basic rate, or a saving of 12½ per cent; a policy period of three years, 2½ times the basic rate, or a saving of 16⅔ per cent; a policy period of four years, 3¼ times the basic rate, or a saving of 18¾ per cent; a policy period of five years, 4 times the basic rate, or a saving of 20 per cent.

Five Year Rates

There are, of course, certain disadvantages to the five year policies. One is the difficulty of adjusting present shorter terms to the longer period; the other is the factor of interest lost because of cash payment so far in advance of the policy year.

However, if all policies are canceled at once and rewritten for the longer period, little loss will result because of short rate cancellation. The chief difficulty is the payment of such a large lump sum only once in five years. If, however, the policies are canceled and rewritten for varying periods to suit the purpose, payments can be smoothed out nicely. Then the full advantage in cost will come permanently in four years.

Another circumstance to consider is that certain companies permit the assured to pay the five year rate (four times the basic rate) over a period of five years. In that way the policy payments are smoothed out and full advantage of the reduction is taken without loss of interest.

Complete records of all insurance policies will save much confusion and eliminate possibilities of lapses. Such a record can be arranged so that it is easily corrected and recopied at the end of the policy year. The record of policies, arranged in columns, should show the following: (1) name of company; (2) name of agent, with address if not local; (3) property insured; (4) policy number; (5) date of policy; (6) date of expiration; (7) amount of policy; (8) insurance rate, and (9) premium.

Some persons look upon the fire insurance inspector as a vicious person bent upon finding all manner of fault. However, the reverse should be true. Like any other such official he may become suspicious in the presence of hostility or grudgingly extended cooperation but he will prove to be a true friend if given the chance.

It is absolutely essential that buildings be inspected regularly and that, following the inspection, proper steps be taken for the correction of such hazards as may be found economically justified. The larger companies usually will make special inspections when asked to do so and in states in which rating bureaus exist a regular corps of men is hired for this purpose. Although it might be necessary to hire the work done, the practice would still be profitable because of the chance to eliminate extra charges, to say nothing of the element of fire loss and danger involved.

Departures from the established rate consist of charges for hazards on the one hand and of credits for special safety devices on the other. Hazardous conditions or equipment responsible for extra charges are legion. They cannot be listed here but they vary from accumulations of trash, improper gasoline cans and faulty extinguishers to insufficient furnace insulation and poor wiring.

Some are impossible of correction and must continue to be a penalty; others would cost so much to correct that neither the savings in premiums nor the actual fire hazards reduced would prove a justification for the increased expense. Judgment on this point is, of course, a local problem.

On the other hand, no one would dispute the good sense of removing an open can of oily waste. Such a hazard might cost $25 per year; to continue its existence would be utter folly. As a matter of fact, a careful examination of conditions about an average school building might reveal that the expenditure of a $100 actually would reduce the fire insurance premiums a similar amount the first year, to say nothing of the future.

The difficulty is that often we do not realize the cost of such hazards. To know that defective wiring makes insurance more costly is one thing; to realize that a 10 per cent charge in rates is costing $90 is another. The fact would be emphasized even more if investigation revealed that the defective wiring could be made to pass inspection by the expenditure of $75.

Best Safety Device

While there are many ways to obtain credits for safety appliances, probably the greatest saving in premiums can be made from the installation of automatic sprinkler systems. Although it is probably true that the cost of installation is so high that it would not be economical to place sprinklers in academic classrooms yet their installation in certain portions of the building might be advisable. Particularly is this true in such departments as the woodworking shops. The possible economy of such a move may easily be ascertained, the two elements of expense being the original installation (about $100 for an ordinary classroom) and the extra water rental resulting from the sprinkler system.

One is faced finally with the realization that the ultimate solution of fire hazards rests with the original plans of school buildings. If hazards were eliminated in the design of the building, they would not raise their heads to plague school executives throughout the life of the structure. Furthermore, the best place to begin is before the architect has had a chance to dazzle one with his plans. In reality, the first thing to think about in designing a school building should be the fire hazards inherent in various types of construction. Peaked roofs are fine to look at, but unless fireproof they are a hazard. Fireproof stair wells are not so beautiful as the open type, but they are safe from drafts, so they are more desirable from an insurance standpoint.

Thus the entire insurance program resolves itself into a system of careful planning, analysis and correction.

Cafeteria in New Dress

EMILY H. DAVIS

Children will like these three curtain and screen designs.

SMALL wonder that often only under protest can the child be persuaded to eat in the school cafeteria. The drugstore and the hot lunch stand may serve poor food but they do it in an atmosphere that is novel. To the child the bleak drabness of the school cafeteria is certainly not to be preferred to the activity and the advertising of "the place on the corner."

In the newer buildings the cafeteria has received some consideration in the architect's plans and in the general decorating scheme. It is mainly the older buildings with which this discussion is concerned. In them the cafeteria frequently has been added at a much later date and has been assigned to any vacant corner.

What can be done to make lunchrooms more attractive? Someone may question, "Why make the effort? The children will only ruin it. They do not care." All too often they have had nothing for which to care. It would be a sad commentary on the type of education they are receiving if they did not develop a regard for property of the group.

One of the first things to determine in any decorating problem is the purpose for which the room is intended. For the school cafeteria the obvious thing is to serve the pupils as rapidly and as efficiently as possible with good food, prepared and served under sanitary conditions and at the lowest price. The surroundings should be as attractive and as inviting as possible.

Let us consider a few points peculiar to this room. Remember that the cafeteria is primarily for the children, representing a fairly wide age range, and that it includes the adult only as a minor factor. The children are in the room for a short time once a day and that during daylight hours. At most they are there five times a week. Moreover, the room is used chiefly during the cooler months of the year.

How do these factors affect decoration? Children like clear bright colors. A distinction is to be drawn between the subdued subtle color schemes preferred by the adult and the gay and cheerful ones that will be chosen by the younger group if it is given the opportunity to make the selection.

The general color tone can be delightfully gay and airy without being too exciting. A different color feeling can be used in a room occupied for a short period and infrequently than in one used for hours at a time. For the most part we have only to consider the appearance of colors in daylight. As some of the gayer colors are warm ones, the exclusion of the summer months might be a factor in selection.

The larger and major parts should receive first consideration in approaching any problem of design. In interior decoration these are the backgrounds of floor, walls, ceilings and woodwork. Let us start with the floor, the base of the room. In older buildings there are composition, cement, wood of various finishes and linoleum floors. Without considerable expenditure perhaps the best that can be hoped for is to maintain whatever is there in good condition.

In the majority of cases the walls and ceiling are of painted plaster and are redone at fairly frequent intervals for reasons of cleanliness. But why must they always be the same everlasting, endless tan? A good background color, yes, but certainly not imaginative or inspired, and one that becomes deadly monotonous.

It seems to have been an unwritten law that classrooms and corridors of

the older type must be a grayed tan. The cafeteria, a unit apart, might well set a precedent for enlivening the whole building. Why not gain double value for that expenditure of money by making it contribute to the decorative scheme as well as the utilitarian?

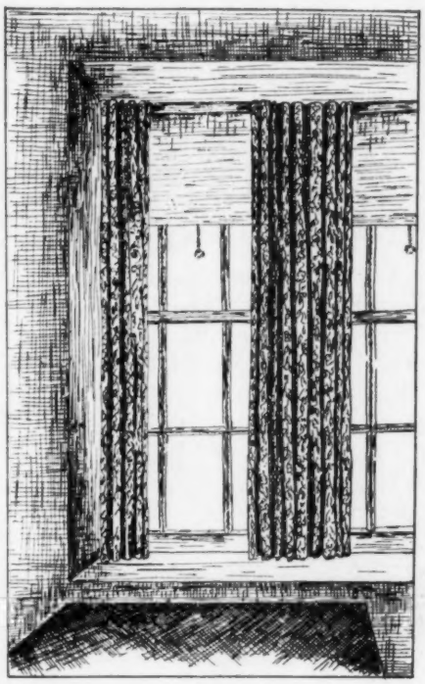
One glance at a color chart will show a wide range of possibilities. With a little cooperation from the painter, in the matter of mixing, an infinite number of truly lovely colors can be yours. For other suggestions and inspiration look at samples of wallpaper or textiles and you will gain more of a conception of how many variations there are of "yellow, blue, green."

In general, whatever hue is selected, the value should be from somewhat above middle to light. It should not be too brilliant because it comes in such large areas, but let it say something. Do not always gray it until it has lost all individuality.

Often the lower part of the wall is painted in a wainscot fashion and somewhat darker in value than the section above. This does not have to be a dirty brown or a drab olive green. With yellow or maize walls this part may be a rich warm brown, a burgundy or just the right shade of slate blue. With an apple green wall one may combine a darker green or perhaps a slightly grayed wine color; with a warm gray, a deep pompeian red. Ceilings probably will be a lighter value of the upper part of the walls or, if high, might continue the same color.

The problem of woodwork is a minor one in many buildings of fireproof construction. It may be painted to match the lower section of the wall or, if the wall is of a continuous color, a darker value of the same. A natural finish will be satisfactory. Keep in mind that woodwork poor in design and of inferior material can be minimized to some extent by

Curtains are out of the way if they are kept within the recessed window space. In the lower sketch the use of chair backs and table runner are suggested for old furniture. A two-toned wall is indicated and a large wall panel is used to form a harmonious unit.



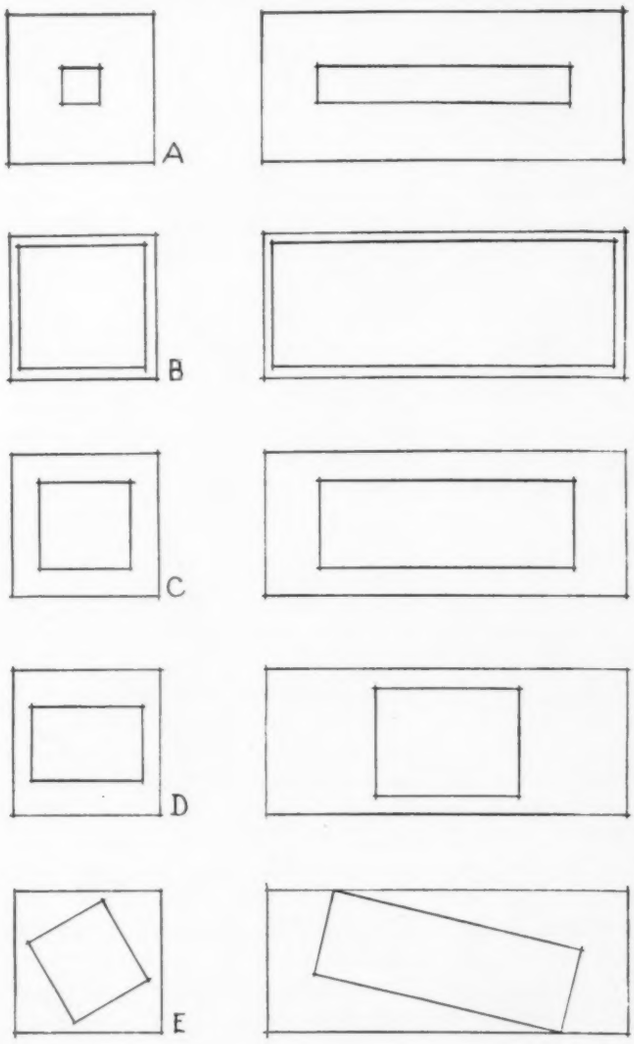
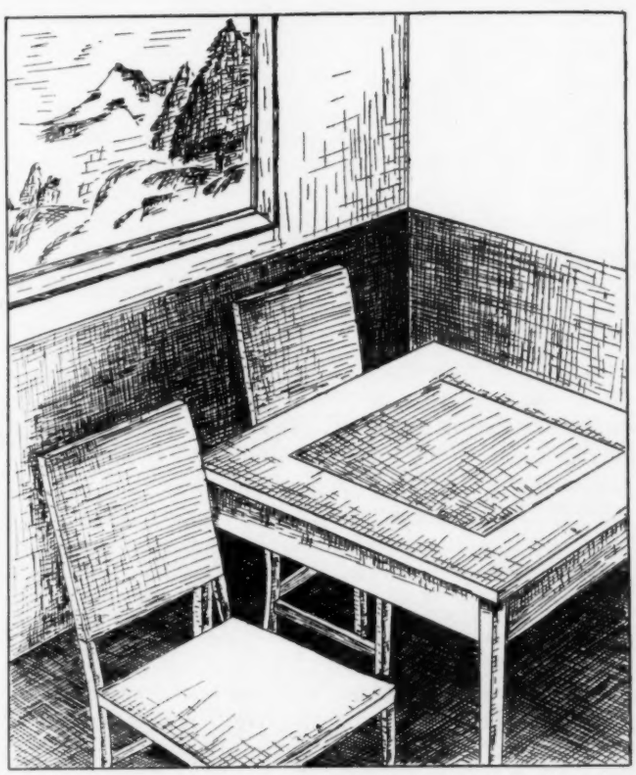


Table top and runner: A, too small; B, not too large; C, good size and shape; D, shapes contrast too sharply; E, placed at disturbing angle.



reducing any contrasts with the walls.

Frequently both walls and ceiling are festooned with pipes. If the engineers will permit, paint them the same as the wall or ceiling against which they come. The next best suggestion is a dull metal finish. Anything is to be preferred to a stained ragged asbestos.

The majority of cafeterias have a number of windows. If nothing is done with them they look bleak and bare and an inexpensive decorative opportunity has been missed. As shades serve as adequate light control, the expenditure for curtains will have to be justified on the basis of decorative effect.

Picking Out Curtain Material

Any material selected for such use should be colorfast, should wash perfectly and iron easily. The curtains must be crisp and fresh at all times. These requirements will eliminate many drapery fabrics satisfactory for use in the home and hotel.

The number of materials left for selection is surprising. By the way, why not go shopping to the cotton yard goods department? There is displayed an almost bewildering array of weights, textures, patterns and colors. Many of them would be suitable for the purpose and some of them are at surprisingly low prices. The yardage for even a few windows can present a staggering total to one who has never figured the amount. It is far better to use a cheaper material than to skimp on an expensive one.

Shall these draperies be plain or figured? If they are to be of a thin transparent material, generally classed as glass curtains, and to be used over the entire window area, perhaps they should be plain or at most, simple stripes or plaids in a close color harmony. Such curtains need not be ecru but may be a lovely yellow that will make a room cheerful on the gloomiest day. With warm walls a soft green is preferable.

With heavier material used in strips at either side of the windows, plain material can be effective. A color contrasting to that of the walls, perhaps the same hue but darker or lighter, may be effective. In many modern fabrics the texture is extremely interesting. Then there is that group of fabrics that may be classed as self-patterned. Some of the two-toned reversible materials are in this group.

Next comes the classification of geometrics, including vertical and horizontal stripes, plaids and polka dots in all their variations. In the case of stripes, remember that printed vertical lines are fairly sure to be straight with the thread but printed horizontals are rarely so. With woven patterns this is not a factor. Last, there is the group of definitely all-over patterns in unlimited types and color range.

In making curtains, take all measurements carefully and accurately, allow for hems at top and bottom and for shrinkage. One of the first questions in regard to curtains is how long shall they be. In the case of a building having thick walls, windows are recessed and have a wide sill. The curtains are out of the way if kept within this space. Whatever length is decided upon, stop them at some architectural feature.

Cut the material on the straight of the goods and remove all selvages. Keep the top fairly simple for ironing, a casing with or without heading that can be ironed flat, or a few simple pleats that can be managed easily. Considering the types of materials, the use to which they are to be put and the frequent launderings and ironings they will receive, machine stitching would seem to be most practical. Perhaps the mothers' group, the P.-T.A. or the home economics classes will assist in making the curtains.

Covering Old Chair Backs

Frequently the battered chairs and tables must continue to serve. A device that has often been used is that of small chair back covers, which, incidentally, must fit perfectly. The materials should be plain, particularly if the curtains are figured, and the color should repeat parts of the scheme already established.

A table runner may be used provided it is of a heavy material that will stay in place. It must be in harmony with the shape of the table top, not too small or too large. Please put it on with the edges parallel to the lines of the table, not at an angle. As for color it should pick up that of the chair backs. All textiles so used must be spotless and easily maintained in that state.

In the event that the furniture can be painted, the finish should be a hard nonabsorbent smooth surface. Unless time can be taken to band and line things well a plain color treatment is preferable. Stencil designs on the top should be avoided unless the design is excellent. As for the color, that of the painted woodwork or of the lower section of the wall will be a good choice. A natural finished wood is always satisfactory.

Should you be fortunate enough to have new furniture, there are any number of excellent tables. Linoleum, glass, cork and various plastic materials offer practically indestructible top surfacing in any color that may be desired. Incidentally, many of these can be attached to old tables and are worth investigating.

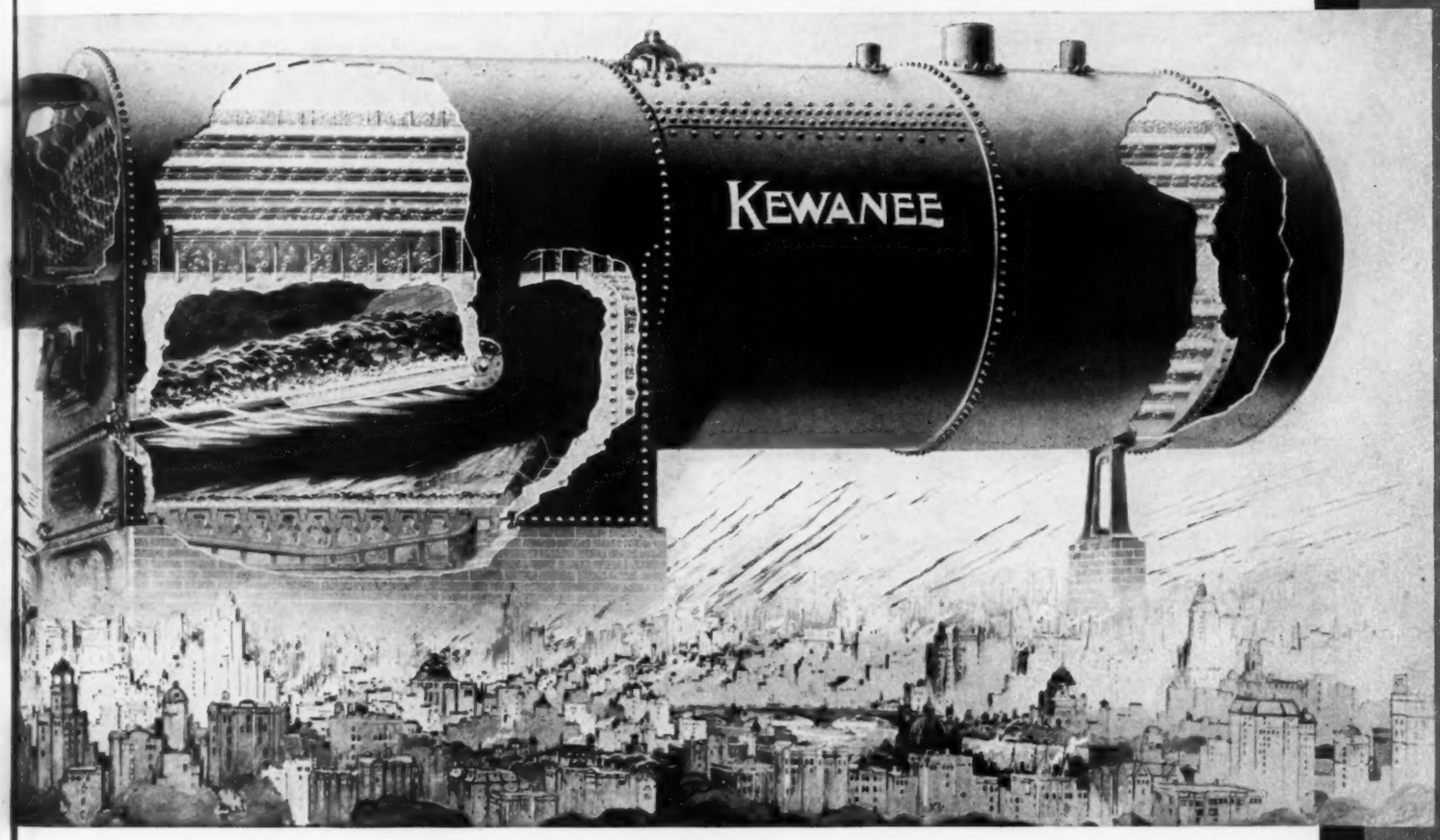
Screens Are Handy

Screens have been used in the decoration of the home and may well serve any number of purposes in the cafeteria. In a public place of this kind, where many people are moving and where space is limited, they must be substantial and well-balanced, whether of the folding-panel or the single-unit type. When not in use, screens may form a flat decorative unit against the wall.

Sometimes small club groups request a measure of privacy. Screens will serve to accomplish this. Often the cafeteria serves the very young children by having a section of the room partially separated by screens and with special small tables and chairs provided for them. There are any number of wallpapers and textiles, of a design character appealing to the child, that may be used on their side of the screen.

So that the older children will not feel slighted, their side of the screen may likewise be attractively treated. Perhaps the art classes will design panels that can be inserted and changed with little trouble, provided the screens were constructed with that in mind. Again there are any number of wallpapers and textiles that can be used to good advantage and little cost. Similar, easily re-

13,376 KEWANEE Steel Boilers Heat 8,834 Schools



There are 13,376 Kewanee Boilers heating 8,834 of America's finest schools, both large and small, burning every kind of fuel...coal hand-fired or mechanically-fired by Stoker, Oil or Gas Burner.

Its well-known dependability and proven economy in operating and upkeep costs have made Kewanee the outstanding steel boiler for heating schools and all other fine buildings as well.

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moved framed panels may be used as wall decorations.

In any of the possible decorative wall units, care must be taken to have them on the children's eye level. Although the ceiling may be high, things must be down where they can be seen. Have them large enough for the wall space against which they are placed and in harmony with it as to shape. Care should be taken that anything placed against the walls for decoration has real merit of design.

It will take some money to do any of these things, but considerably more thought and initiative. You will not be able to do all you may wish from the first. Why not begin by looking over the situation, taking account of what you have, what needs to be done and, with one item at a time, set out to make the plans realities? The main thing is to consider the problem as a whole, to select one large design unit and then to start doing something about it. No matter how small the initial undertaking, you will find that your efforts are more than repaid and will serve as impetus for further endeavor. That's our experience.

FOOD FOR THOUGHT

Cafeteria Building

• Tentative plans for a cafeteria to serve the South Park Independent School District of Beaumont, Tex., call for an entire building to serve a total of 3000 pupils in the South Park elementary and high schools and Lamar College.

The building, which will be ready in September, will be a two story structure with a modern cafeteria located on the first floor and a large clubroom adequate for meetings of the alumni association and clubs, on the second floor. The structure will be erected on the South Park school campus easily accessible to the pupils of the two schools and students of the junior college it is to serve.

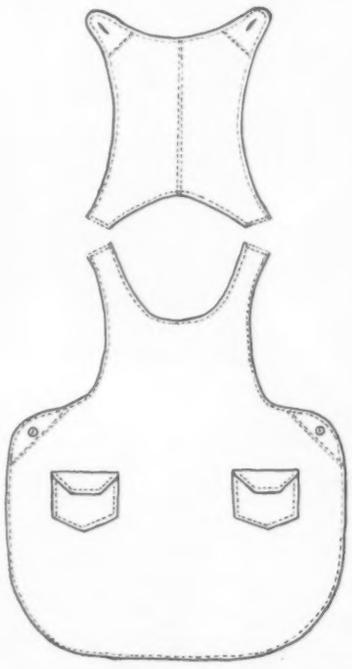
Noon-Hour Activities

• Noon-hour activities at the Cozad schools in Nebraska center about a lunchroom which has been equipped with tables, chairs, ping pong tables, in addition to a variety of table games, a radio and reading room. A kitchen has been equipped with sink, gas stove, cabinets, dishes and other conveniences. Hot dishes are served twice each week.

Apron for Pupil Employes

• Pupil workers in school cafeterias usually serve as counter workers or they clean tables or collect trays and dishes. It is important that they appear immaculate and that their clothing be carefully protected during the working period. Attractive smocks in various colors are frequently provided for the girls while coats of the type obtained through the ordinary laundry service are furnished for the boys.

In the school cafeterias at Fort Worth, Tex., under the direction of



Mrs. Bena Hoskins, an unusual type of apron is provided for the girls. A drawing of it is shown. The apron is attractive in appearance and provides good coverage for the girls' dresses.

Living at Lake Mills

• Modern bus transportation has not as yet been made available to rural high school pupils surrounding the town of Lake Mills, Iowa. That rural pupils may live in the town during the week at a nominal expense for board without the inconvenience, expense an! danger of driving back and forth to school each day, the superintendent has arranged a room in the school building where pupils may eat three meals each day.

A woman is employed to plan and cook the meals. Pupils bring provisions from home as requested by her and are credited with their contributions. They also assist with the work. The expense, pro-rated among the pupils, amounts to less than $2 per week per pupil.

Rochester Meeting

• The school lunchroom will be given special attention on the program for the fourth annual conference of Food Service Directors at Rochester, N. Y., November 3 to 5, but the program is full of interest for all dietitians and others responsible for food administration.

Other speakers, in addition to those announced in The NATION'S SCHOOLS last month, include: Clarence B. Kugler, manager of school lunchrooms, Philadelphia; Paul Williams, senior marketing specialist, U. S. Bureau of Agriculture; Prof. W. S. Mueller, Massachusetts State College; Howard Briggs, former vocational director, Cleveland public schools, and Lorena Richardson, manager, restaurant department, Simpson's Arcadian Court, Toronto, Ont.

Reports of food conference studies, in addition to those announced on the preliminary schedule, will be given by Marian C. Allen, Marshall High School, Cleveland, on dishwashing compounds; Olive Fay, Rochester, N. Y., on the score card on sanitation; Winning Pendergast, Detroit, on qualifications of school lunchroom managers, and Edna Gilbert, Youngstown, Ohio, on uniforms.

Milk Experiment

• In a health project at Bloomfield, Iowa, milk was furnished twenty grade pupils for three months. Result: weight gains of pupils ranged from 2 to 11 pounds, the average being 5 pounds.

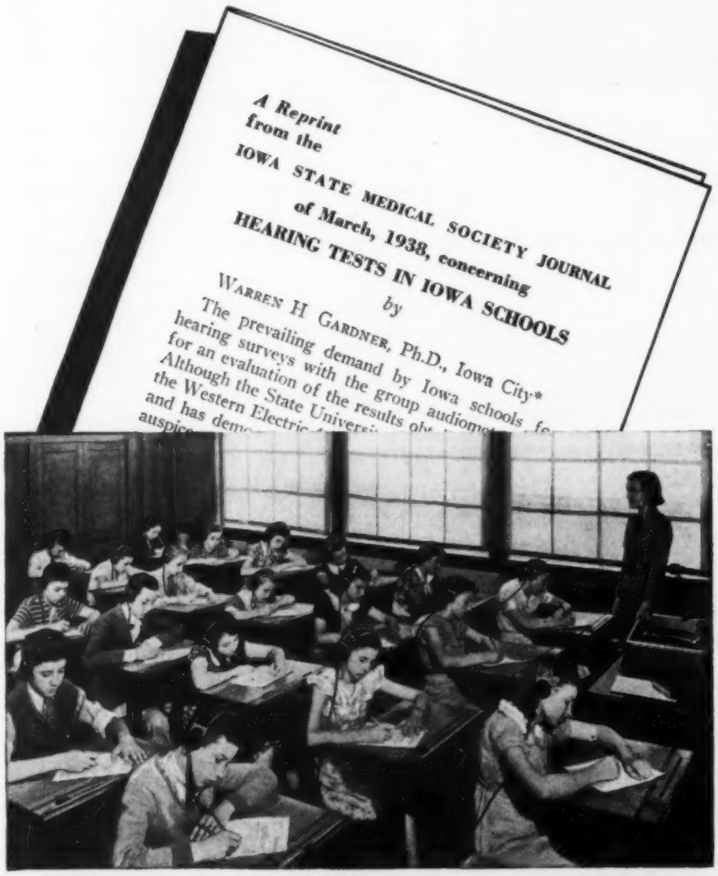
Local History at Lunch

• Art pupils in the schools of Austin, Minn., are painting a 60-foot mural in the cafeteria. This is the work of pupils from the seventh grade through advanced classes on the theme of progress of the city of Austin. Research is conducted by delving into old magazines and talking with older residents.

You should read this report on

60,000 Hearing Tests

. . . made in Iowa schools with the Western Electric Audiometer



BECAUSE it points out clearly a condition that confronts every school physician and educator—and also points the way to rectify this condition—we have reprinted a report recently published in the Iowa State Medical Society Journal.

It gives you briefly the findings of a 2-year survey made under the auspices of the State University of Iowa. Using a Western Electric group Audiometer—which tests 40 children at one time—the examiner tested the hearing of 46,095 pupils. He found 3,330 had defective hearing—a ratio of 1 in 14. Re-tests of these children raised the total of tests to over 60,000.

Many unsuspected hearing defects were discovered. Hard-of-hearing children—regarded as unintelligent—were found in ungraded rooms, or floundering in regular classes. In some cities, 45% of the pupils were sent to physicians for ear examinations. 60% to 80% of these were given, or were recommended for, treatment or operation. The hearing of many was restored to normal.

For your free copy of this important report—and a booklet giving details of the Western Electric 4B Audiometer which makes possible quick, accurate, group hearing tests—send the coupon to Graybar today.

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Gentlemen: Please send me reprint of "Hearing Tests in Iowa Schools" and details of the Western Electric 4B Audiometer.

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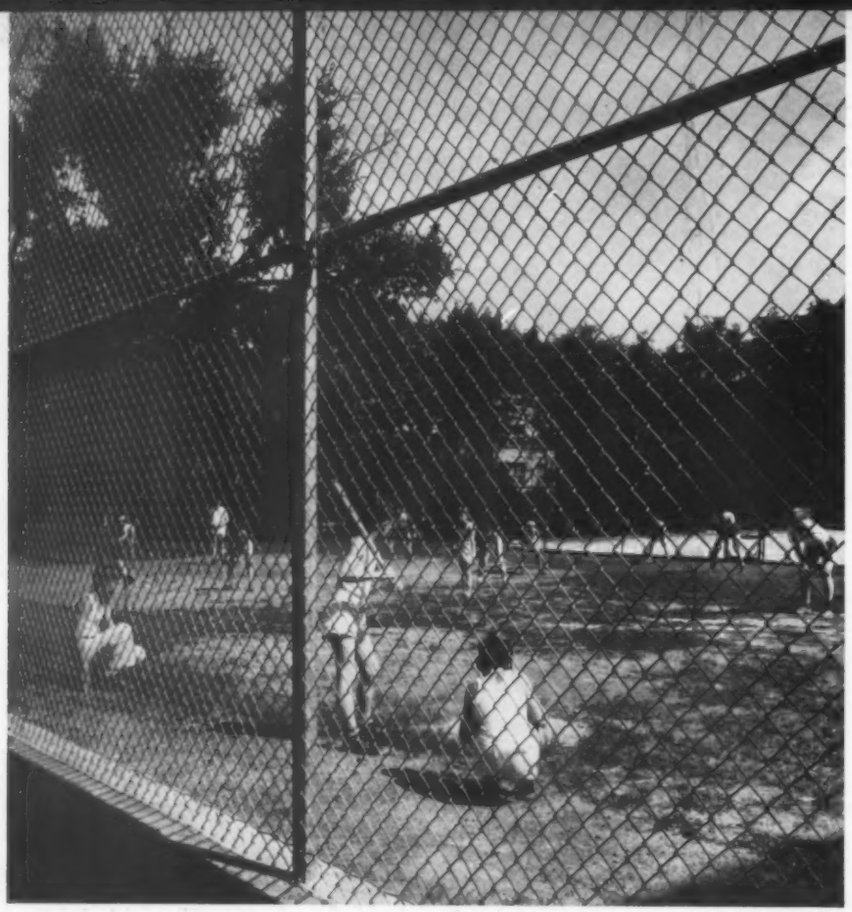

For general purposes the chain link metal fence is the most practical and economical type for schools. Good judgment is essential in determining what style, height, trimmings, gates and accessories are required to suit a particular situation.

Fences for Safety

BRYAN J. LYNCH

THE importance of school fencing as a safeguard to pupils, to school property and to the surrounding neighborhood is well recognized. The pupil, while on school property, is the constant responsibility of the school. An adequate boundary fence guards him from traffic hazards and from that more insidious danger, the peddler of objectionable literature, food and drugs. It protects the school property from use by unauthorized persons and from depredation by hoodlums. It eliminates neighborhood conflicts. Within the school grounds subsidiary fences provide a means of segregating certain areas for special uses and age groups.

Fences of an architectural character or fence location and layout are problems of architectural and landscape design and should be included in the fundamental plans for the development of the school. Of paramount interest at this time is the matter of selecting suitable school fencing possessing both qualities of low cost and low maintenance.

For general purposes the chain link metal fence is the most practical and economical type for schools. In this category there are many standard types now available in varying heights and designs to meet almost every possible need. Good judgment is essential in determining what style, height, trimmings, gates and accessories are required to suit the particular situation.

After such decisions have been made, however, there remain certain technical considerations that the layman is not equipped to solve. For this reason leading fence manufacturers maintain expert planning, estimating and advisory services which are available without charge to prospective fence purchasers.

Science has made many forward strides in providing longer life for property fencing metals. Also, it has discovered that some metals have much longer life than others under the various destructive atmospheric conditions peculiar to different localities. Such conditions include salt spray, alkali, acid or other chemical fumes—often carried long distances in the air from neighboring oceans, mineral soils, chemical plants or factories.

Any consideration of chain link metal fencing for schools should include a study of local atmospheric peculiarities and the selection of the metal most resistant to any destructive chemical condition discovered. In many fencing installations such a precautionary study of air conditions results in adding many years to the effective life and appearance of the chain link fence selected.

Copper bearing steel fencing with sufficient weight of zinc galvanizing is an economical chain link fencing for all localities favorable to its use. While various technical methods are used by different manufacturers in the application of the protective zinc coating, including hot-dip and electro galvanizing, the most important considerations in purchasing concern the thickness, evenness and weight of zinc applied to the basic metal.

Former standards of zinc application required 7/10 ounce to 1 ounce of zinc coating per square foot of wire. Leading fence manufacturers today, however, have set a minimum of 1.2 ounces of zinc coating per square foot as the least requirement for effective weathering protection, some recommending up to 2.4 ounces, double the minimum requirement.

Aluminum woven wire fencing combines to a high degree corrosion

A *Streamlined...Compact...Efficient* Desk

***The* Heywood SDK 15**

is a compact, modern desk which saves valuable space without sacrifice of comfort. It permits flexibility in room arrangement, too, and in the space of a few minutes may be changed from straight-aisle alignment to any desired group or special study formations. The SDK 15 is available with chromium plated or enamelled tubing. May we tell you in detail about this and other practical, modern school desks recently introduced by Heywood-Wakefield?

1938

The H-W School Furniture Catalogue is now ready . . . a copy is yours for the asking.

HEYWOOD-WAKEFIELD

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PROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome, H.W.&D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

HYNSON, WESTCOTT & DUNNING, INC.
Baltimore, Maryland

After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

MERCUROCHROME, H. W. & D.
(*Dibrom-oxymercuri-fluorescein-sodium*)

resistance, strength and low maintenance cost. Its light weight (approximately one-third the weight of steel) also results in considerable reduction of weight on the supporting structure. Aluminum wires, being composed of corrosion-resisting material throughout their entire thickness, make it unnecessary to provide any exterior coat such as paint or galvanizing. This eliminates any necessity for periodic painting after erection, thereby reducing maintenance cost to a minimum, an item of first importance.

Stainless steel is another fence metal possessing distinct superiorities. It provides a fence immune to rust without a protective coating, with tensile strength four times that of low carbon steel.

With this method, it is possible to use much lighter gauge stainless steel wire to obtain strength equal to that of much heavier fencing. In view of the modern trend toward stainless steel metallic construction everywhere, its use might well enter consideration for any contemplated school fencing installation, especially since its cost has been brought down to little above that of galvanized copper bearing steel.

Galvanized ingot iron, costing a trifle more than ordinary steel fabric, provides another type of time tested, corrosion-resisting fence suitable for many installations.

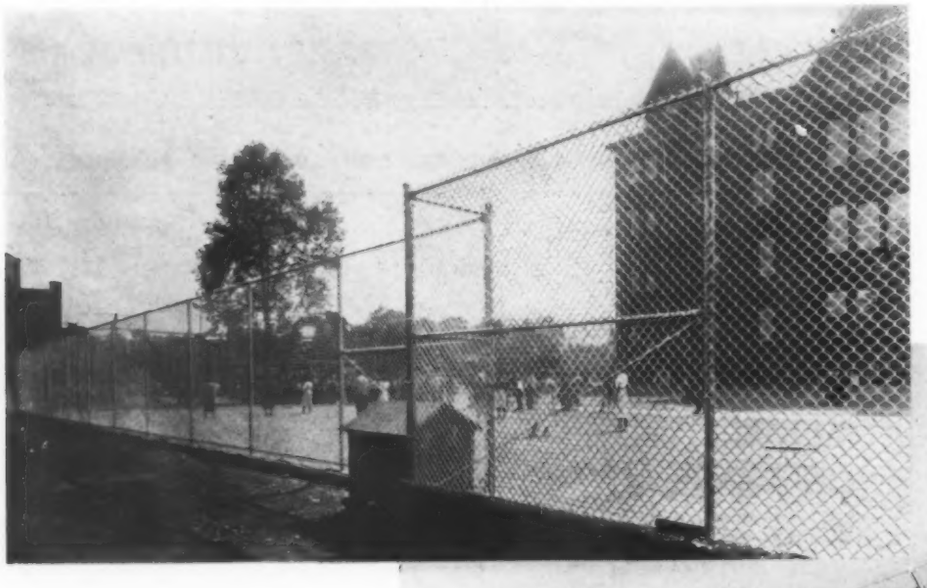
Recommendations as to the selection of one of these fencing metals for any particular installation is a matter to be determined after examining all conditions pertinent to that installation.

Following this, fence erection is the final matter for expert handling which determines to a great degree the effective life of the fence. Fence-erection crews are maintained by leading manufacturers whose finished work assures fullest value from the fence investment.

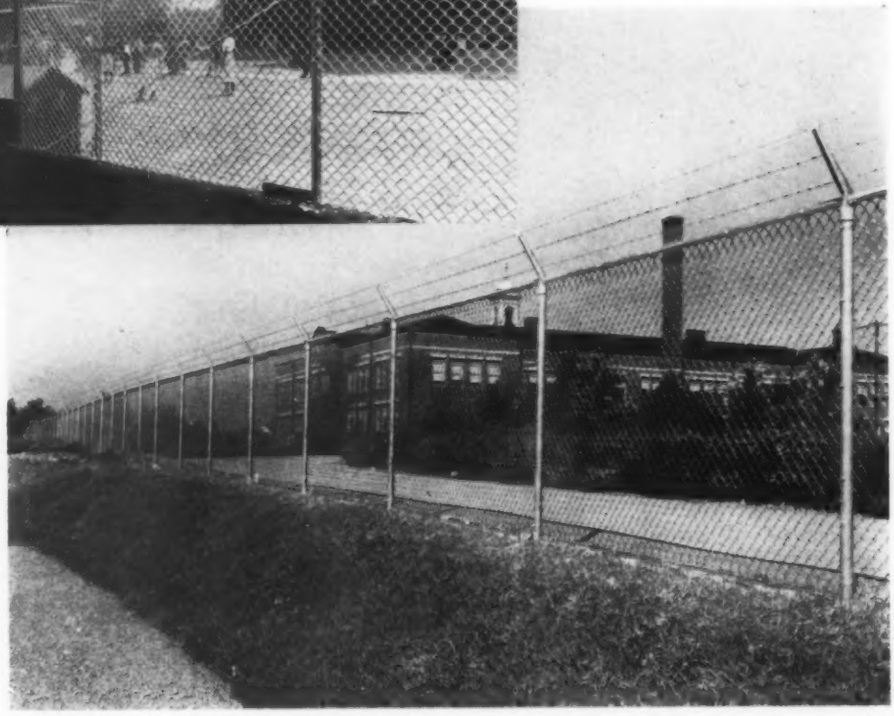
The strictly utilitarian character of the types of fencing discussed cannot well be disguised. This does not mean, however, that they are unsightly.

There is a certain sort of beauty in pure functionalism which is difficult to describe but which nevertheless satisfies something in our esthetic sensibilities. To attempt to screen out such a feature would not only be futile but would tend to detract from its appearance by denying its suitability. A few vines used occasionally as accents or in rhythmic spacing may, however, add a pleasing note to soften the severe lines of the fence.

With these conditions carefully met, the resultant "tailor-made" school fence firmly, quietly settles down to safeguarding the pupils, the property and the school discipline.



Fence erection is the final matter for expert handling. Erection crews are maintained by the leading manufacturers.



A precautionary study of air conditions results in adding many years to the effective life of a chain link fence and reducing maintenance.

SEE WHAT A DIFFERENCE IN LIGHT!

Two similar grade school rooms in Highland Park, Michigan, before and after the installation of Wakefield Commodores.

WHEN THEY MODERNIZED WITH COMMODORES

These two pictures show why you will want to see the Wakefield COMMODORE before you decide on school lighting for new buildings or old.

More light . . . and better light

The Commodore gives 83% of the light from the bare bulb, according to Electrical Testing Laboratories, world-famous research and testing organization . . . *more light* than most indirect fixtures. And it is soft, glareless light that helps both pupils and teachers see better.

Low maintenance costs

Because of its 18-ounce shade, molded from Plaskon, the Commodore is easier and safer to handle and clean; breakage is less; maintenance cost is low. Incidentally, its clean-cut design and cheery light foster cleanliness and new respect for school property.

Ask to see this unit demonstrated in your office. Takes only a minute. Requires only a floor plug. No obligation.

● NEW 60-PAGE BOOK ON SCHOOL LIGHTING

Prepared under the joint sponsorship of the Illuminating Engineering Society, and the American Institute of Architects, and approved by the American Standards Association, this new, authoritative book "American Recommended Practice of School Lighting," is just off the press. We have a limited number of copies which we will be glad to send, free, to interested school officials. If you want one, we suggest that you write today, since we can fill requests only while our supply lasts.

THE F. W. WAKEFIELD BRASS CO.
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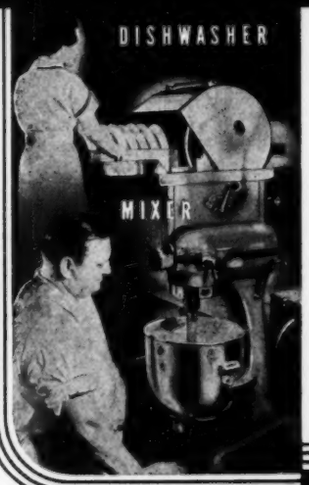
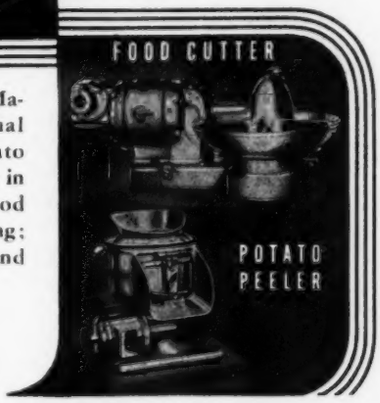
. . . and ALL HOBART MACHINES



"S O S" is a striking folder containing important, timely information for Kitchen Operators. It will be mailed soon. Watch for it. Make sure that a copy reaches you personally. Use coupon below.

See, for example, how the Hobart KITCHEN SLICER'S *automatic accuracy* produces servings at definitely known costs —and *extra servings!*



See how EACH Hobart Machine contributes actual savings daily: in potato peeling; in dishwashing; in mixing and general food preparing; in food cutting; in whipping cream and many other operations.

If you are interested in lower costs of serving meals, be sure to read this "S O S" (Save, Oh Save) Folder.

THE HOBART MFG. CO., 1009 Penn Ave., Troy, Ohio

HOBART ELECTRIC KITCHEN Machines

Please be sure to mail me copy of "S O S" free. Especially interested in

☐ Kitchen Slicers ☐ Dishwashers ☐ Mixers
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BETTER PLANT PRACTICES

Notes for a Scrapbook

In the desk or on the bookshelf of every custodian should be a scrapbook with provision for filing and keeping for reference suggestions gathered here and there that will help in his work. As a result of careful reading, clipping and storing all items he encounters pertaining to school maintenance, he will one day find himself in possession of the most valuable reference guide possible, one that money cannot buy.

This is brought to mind by a talk one hot day last summer with a maintenance man who, with a few spare minutes on his hands, proceeded to unburden himself on reading — not summer novels or heavy literature— but authoritative texts on the upkeep of institutions, and particularly schools. There wasn't anything that was practical, he lamented, and proceeded to make a confession. He was assembling data that some day he might arrange, edit and place in such form that they would comprise a convenient handbook for others. Then he produced his scrapbook. One look through page after page of useful information and we vowed to pass the idea along to others.

Incidentally, there could be no better time to start such a book than right now when the fall term is beginning. You won't regret it, we promise you.

Just to assure a good start, here are a few items that might be included.

The "Put" in Putty

Don't blame the paint when blisters appear and there are unmistakable signs of peeling. It may be due to the putty, or rather to the lack of it.

This unfortunate condition exists frequently in buildings that are cheaply constructed and are an indication that little or no putty has been used. Consequently, the paint breaks away from the cracks and the nail holes and moisture penetrates the back of the siding. The sun then draws the moisture to the surface, blistering the paint and causing peeling. Faced with this problem, there is but one safe solution— such peeling paint should be burned off and the necessary amounts of putty carefully applied.

On one-coat work, a thorough putty job cannot be done, one paint manufacturer tells us. The reason is that the putty will not adhere satisfactorily unless one coat of paint is applied before any puttying is done. Surfaces in the condition requiring considerable puttying should have two coats of paint, with the puttying done between coats. Seal the surface tightly with putty to prevent moisture from penetrating.

Save That Tree!

With more attention constantly being given to landscaping school properties, there is more need than ever for reliable information on the care of trees, plants and lawns. It is suggested, therefore, that a substantial number of pages in the custodian's scrapbook be assigned to the care of grounds.

Winter, as many of us already know, inflicts severe damage to trees. A few severe frost cracks and the tree is lost. In New Jersey, for example, Norway maples died in large numbers owing to winter injury. This prompted the New Jersey Agricultural Experiment Station to assemble information on the subject, prepared by R. P. White, associate plant pathologist. Here is what Mr. White has to say, in part:

"Trees injured by winter are weakened throughout the growing season and as a result are more subject to attack by various diseases and insect pests. It has been repeatedly observed that well fertilized trees do not suffer from the summer drouth period and there is reason to believe that they also withstand with greater ease the rigors of winter. Shade tree fertilization practices are not standardized, but it is generally recognized among arborists that a complete plant food containing nitrogen, phosphorus and potash is necessary. Some favor fall fertilization, some, spring. Both will produce the desired results as has been repeatedly proved in general practice."

"Wash Leather"

When is chamois skin not chamois skin at all but nothing more nor less than sheepskin? Most of the time, according to a reader who has investigated carefully and assures us that there are practically no skins on the market today that are tanned from the chamois goat hide, for the simple reason that the chamois goat is practically extinct.

Chamois skins, it seems, originally were produced from the skins of the chamois animal but today are really produced from the skin of sheep, most of these sheepskins being imported.

The inner lining or flesher is split from the sheepskin while still in the raw state. It is then impregnated with cod oil, which is oxidized in the skin, causing the change in the skin fiber known as tanning. After the surplus oil is removed, the skin is buffed to produce a soft finish and cut to size and shape. This is the general process in producing domestic skins.

The point determining the principal difference in chamois skin quality is based usually on the treatment by which the tanning process is accomplished. The French tanned chamois, made from selected skins and tanned by hand, is the best in quality, and only the finest grade of fresh green sheepskin fleshers are used.

In order to give the user the greatest amount of wear, the skins are buffed or finished only on the flesh side. This gives them greater absorbing, as well as wearing quality. Although the unbuffed side sometimes appears rough when dried, the skin when soaked in water will be as soft and pliable as any of the thinner double dressed skins. The hand tanning process gives an ability to pick up water and to retain pliability that machine-processing will not equal.

In the United States, all chamois skins are tanned from pickled skins, or skins packed in a salt and vitriol solution. When ready for preparation, these skins are washed and "plumped," that is, increased in thickness so that they can be put through the splitting machine which separates the outer portion of the skin from the "flesher" or inner portion. It is from the flesher that the chamois skin is produced.

The tanning process calls for highly skilled workmanship, as an overtanned chamois is as bad as an undertanned one. Perfect skins are products of skill and long experience. Chamois skins, therefore, are really sheepskins tanned by special process. Truly the correct name is "wash leather."

Open Doors

There seems to be little justification for locking the door leading from the school interior to the boiler room, either during the day or night. For the additional safety assured, which is practically negligible, serious inconvenience can result in the event of emergency.

It is not unusual, for example, for relief engineers to be called at early morning hours to replace men taken ill during the night. Master keys with which they are provided assure them access to the building, but are of no avail when it is discovered that there are locks on the boiler room doors to which they have no keys.

It would be a good idea if the engineer were to leave his plant on the assumption that a relief man might have to start it the next morning.

What! No brass bands?

We're delighted, of course, that the 1938 World's Champion Typist won his title on an L C Smith! But (as Li Hung Chang said about the horse race) it was already known that some people can type faster than others.

Using the same L C Smith typewriter (without speed adjustments) which he uses every day in his H. O. L. C. job in Chicago, Mr. Norman Saksvig won the Professional Event, June 21-22 (and the 1938 World's Speed Championship) with a total of 41,453 strokes...

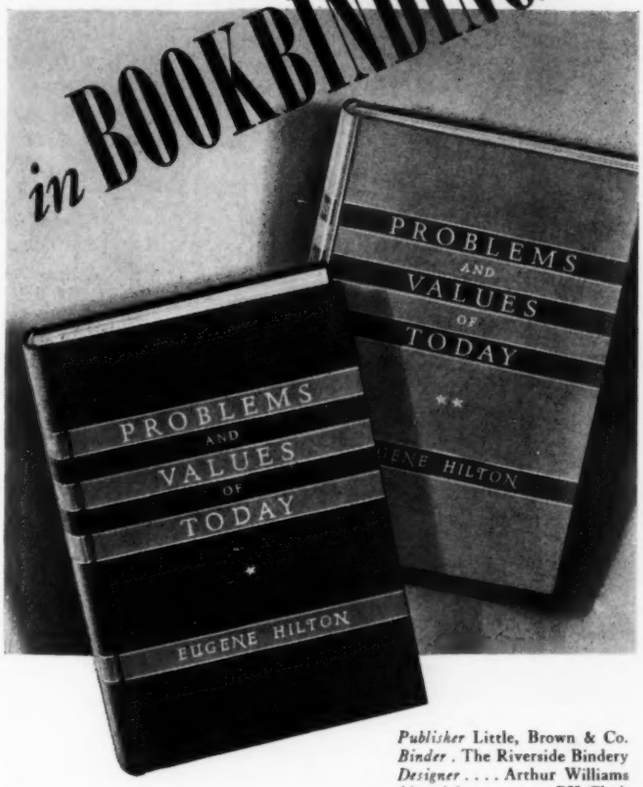
over 11½ strokes per second for one solid hour!

We congratulate Mr. Saksvig . . . but we continue to maintain that such exceptional typing ability can make speed records on *any* good typewriter (note that in the past five years world championships have now been won on *three* different makes). We're especially glad this title was won on our regular stock machine. Because speed saves money for you, Mr. Businessman, when...and *only* when...it's used in *your* office, on *your* work—and when you can count on it year in and year out. And the L C Smith, with its easy ball bearing action and floating shift, has won contests of *that* sort for many years, and against all comers!

THE NEW *Super-Speed* **L C SMITH**

L C SMITH & CORONA TYPEWRITERS INC
Desk 9 155 Almond Street Syracuse, N. Y.

"PROBLEMS AND VALUES OF TODAY" in BOOKBINDING



Publisher Little, Brown & Co.
Binder . The Riverside Bindery
Designer . . . . Arthur Williams
Material . . . . . PX Cloth

THROUGH RESEARCH DU PONT HELPS FIND THE ANSWERS!

TIME AFTER TIME the du Pont laboratories tackle tough problems—develop new, improved binding materials to fit particular needs—design new effects and finishes to make books more attractive and more durable. And, guided by du Pont's standard, "Better Things *for* Better Living . . . through Chemistry," valuable contributions are constantly being made to the binding industry.

If you've a difficult problem that needs technical advice, feel free to write. We'd also like to send you samples of PX Cloth and "Fabrikoid" binding materials—and to show you how they'll give you richer looking, sturdier bindings at no extra cost.

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E. I. DU PONT DE NEMOURS & CO., INC.
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"Fabrikoid" material for bookbinding is a companion pyroxylin product to "Tontine" washable window shade cloth.

CORK CEILING
hushes noise in University of Washington Library

THIS sound-conditioned science library is a quiet room because the Corkoustic ceiling soaks up noise the way a sponge soaks up water. It reduces noise approximately 50%. In auditoriums, Corkoustic ceilings improve hearing conditions for speeches or musical programs.

In addition, Corkoustic is a natural insulator and keeps rooms cooler in summer, warmer in winter. It helps cut fuel and air conditioning costs.

Pleasing in texture, Corkoustic can be installed in decorative colors that provide high light-reflection, thereby reducing illumination costs.

Corkoustic is sanitary and inexpensive to maintain because it does not absorb dust or dirt. Repainting is seldom necessary more than once every six to ten years.

Corkoustic can easily be installed over your present ceilings in classrooms, auditoriums, shops, cafeterias, corridors, studios, and offices—wherever noise-reduction or acoustical correction is important.

For full information, write today for "How to Reduce Noise." Armstrong Cork Products Company, Building Materials Division, 1234 State Street, Lancaster, Pennsylvania.

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for noise-quieting and acoustical correction

NEWS IN REVIEW

Record School Construction

Forty-five per cent of all projects allocated since June 22 under the new P.W.A. program have been for schoolhouse construction and represent an expenditure to date of $300,875,145, or 30 per cent of the total construction cost of all types of projects approved.

Of a total of 3485 P.W.A. projects approved, 1570 are school projects.

The construction cost of all projects approved, including schools, totals $910,613,390. With almost an equivalent amount available for further allocations—up until September 30, the date for closing applications—it is expected that the next few months will see school building contracts being let at an unprecedented pace.

Since all projects under the new P.W.A. program must be started by Jan. 1, 1939, that means a faster pace than the record years of 1927 and 1928 when about four hundred fifty million was spent for new schools in twelve months. Buildings must be substantially completed in eighteen months from that time.

These buildings will be constructed and equipped on a basis of an outright 45 per cent grant from P.W.A. The remaining 55 per cent is to be paid by the local school district.

INSTRUCTION

Virginia's Reading Institute

More changes have transpired in American reading instruction during the three and a half decades of the present century than during the entire span of time preceding, Dr. Nila B. Smith of the Indiana University school of education told teachers gathered for the first reading institute held at Madison College, Harrisonburg, Va., recently.

Doctor Smith advocates large emphasis upon the interests and experiences of children to guide selection of material for reading. She recognizes also that existing interests need to be fostered and new ones stimulated continually while using those which already are developed.

With its new telebinocular, ophthalmograph and metronoscope in use, the college began a definite systematic attempt to establish a clinical service in reading.

The institute included demonstrations of reading procedures in campus laboratory classes, a display of basal and supplementary readers by publishers and a general exhibit of children's books by the library staff.

News Map Service

Progressive education and its methods have brought into being a new teaching device for supplementing elementary and secondary school instruction in civics, government, history, geography and economics classes. This new device is "The News Map of the Week," an illustrated news digest plotted on a map of the world, 35 by 47 inches in size, suitable for wall hanging. The editor is Dr. Curtis D. MacDougall, faculty member of the Medill school of journalism at Northwestern University. The simple editorial style will make the map understandable by even fourth grade pupils, it is said.

Coaching the Coaches

A program of study designed to prepare teacher-coaches for secondary schools will be available to men students of the University of New Hampshire this fall. The work, the first offered in New Hampshire, will be administered as part of the university's teacher training program, with the departments of education and physical education for men cooperating.

Fosters Distributive Training

Pointing to the fact that thousands of high school graduates are looking for jobs, W. Maurice Baker of the University of Kentucky College of Education has urged vocational training in distributive occupations upon high school superintendents throughout that state. A large number of high school pupils will seek employment in retail stores and need training, he said.

Marine Summer Schools

Portly professors in shorts, students in bathing suits, a campus marine and windy, all are vignettes of the summer schools that come to the sea at Beaufort, N. C. The shores of Tidewater Carolina were infested this summer with two colonies of scientists, one from the Woman's College of the University of North Carolina, and the other from Duke University, and an art summer school, a unit of Greensboro College for women. This was the fifth summer session for the Woman's College in zoology. In its first year, Duke University established dormi-

tories, a laboratory and other buildings. The two marine science schools were attracted to Beaufort because of the variety of marine conditions nearby. The U. S. Fisheries Bureau's large research laboratory is on an island not far distant.

RESEARCH

N. Y. Expands Bureau

Thirty-one new positions, at an aggregate yearly salary of $105,564, have been added to the research bureau of the New York City board of education so that the bureau may place greater emphasis upon improvement of teaching methods and may evaluate the school curriculum.

Even with the expanded staff, the bureau is spending only one-tenth of 1 per cent of the total school budget for research, according to Eugene A. Nifenecker, director, bureau of reference, research and statistics.

Psychologic examination of pupils entering the first grade are to be given and a program of diagnostic and remedial work in reading will be conducted in three experimental centers. The bureau also will set up a curriculum library, to determine whether the courses of study now in use should be modified. Present emphasis will be placed on experimentals to improve the reading rate of elementary school children.

The research division will be organized into four general departments: (1) tests and measurements; (2) instructional research; (3) curriculum research, and (4) administrative research.

A special curriculum for bright and slow children is to be organized. The school for bright children will be established in Brooklyn while the experiment with slow pupils will take place in a Bronx school.

All these posts will be filled through the merit system. About half of the places already have been filled, it was said.

PUBLIC RELATIONS

Budgetary Pamphlet

"As a citizen of this community interested in costs of public service, you are given an opportunity to make analysis of educational costs for the public schools as we anticipate a new school year."

Thus has the budget division of the Los Angeles board of education addressed its citizens through a pamphlet containing a tentative budget for the coming year.

The pamphlet is a 20 page booklet,

. . BUT WASHING ROUTINE

CAN BE MADE MORE PLEASANT

ONLY the confirmed optimist believes that the average student eagerly anticipates washing his or her hands and face frequently during school hours. And in fairness to the student, the washing facilities available in many of today's schools do little to encourage this all-important practice.

But there *is* a way to encourage hygienic washing habits among your students during their formative years. It's the Ivory Dispenser way.

Ivory Dispenser service goes far toward making personal cleansing more pleasant. The handsome dispenser itself is inviting. And the soap—pure, gentle, rich lathering Ivory Soap—completes the invitation.

For here is a fine toilet soap which is popular with both youngsters and adults. Here is a soap famous everywhere for its thorough, gentle cleansing action.

Ivory Soap Dispensers are low in first cost and in up-keep. You'll be agreeably surprised to learn how little it costs to install them in all your washrooms. A postcard or letter will bring you an informative folder on Ivory Dispenser service.

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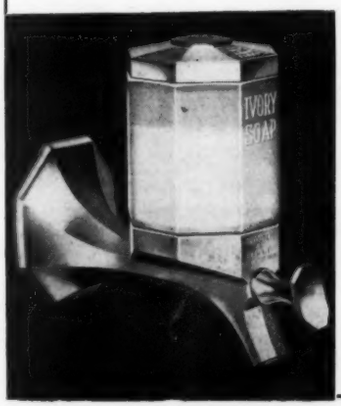


The Ivory Dispenser delivers genuine Ivory Soap in fine, free-flowing *flakes* or *granules*. Each is a self-contained soap dispensing unit. Easy to install; easy to refill. Tamper-proof. Delivers a measured amount of Ivory Soap with each push of the plunger. No parts to rust, tarnish or corrode. Low in first cost and in up-keep.

IVORY SOAP DISPENSERS

profusely illustrated, that speaks for itself in support of budgetary expenditures.

Before the Referendum

Before going to the voters in a referendum September 7, the board of education of Rutherford, N. J., prepared and distributed a booklet containing facts and figures on its proposed Pierrepont School addition. A sum not to exceed $160 had been appropriated for use by the public relations committee of the board of education for use in preparation of the booklet.

Volunteers Campaign

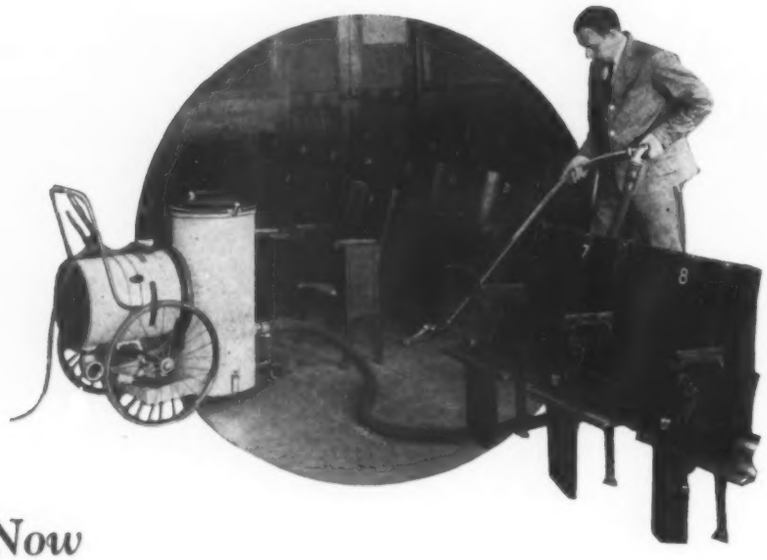
Volunteer health and parents' groups will campaign to make other parents aware of the health needs of their children when the New York City schools reopen this month. Plans have been completed to bring 2500 parents into the schools to help the nurses and doctors with the health registration of the 40,000 boys and girls who will enter the elementary grades for the first time.

For the first time parents will participate in the actual work of the schools on a citywide scale. They will assist in assembling the medical record cards of the children and also will interview mothers of incoming pupils. Appeals will be made to parents to have their children examined by a private physician before they are entered in school.

A call for 2500 parent volunteers already has gone out. By the volunteer assistance of parents it is hoped that school nurses can give children more individual attention than in the past.

Citizens' Project

Upon invitation of educational authorities of Middletown, N. Y., 30 citizens have formed a citizen's committee to conduct a whirlwind campaign in behalf of the $485,000 high school bond issue proposal, which will be submitted to the taxpaying electorate. Efforts will be made to convince taxpayers that the project is wise and economical.



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PUBLICATIONS

Advisory Committee Studies

Nineteen staff studies of the President's Advisory Committee on Education will be published before the end of this year and will be made available to educators through the U. S. Government Printing Office.

These studies were prepared originally during the summer and fall of 1937 for consideration by the committee before preparation of its report to the President. The statements and conclusions contained in the various studies are those of the authors and do not necessarily conform to those which the committee has expressed in its report.

The report on the National Youth Commission, by Drs. Palmer O. Johnson and Oswald L. Harvey, will be the first to come from the press. Doctor Johnson is professor of education at the University of Minnesota and Doctor Harvey was formerly research officer in the National Youth Administration. He has been a member of the staff of the Advisory Committee since 1936.

Exact prices of the publications will not be available in advance of publication. The studies will range in length from 50 to 300 pages.

Geographic Service

Publication of its illustrated Geographic News Bulletins for teachers will be resumed early in October, it has been announced by the National Geographic Society. The bulletins are issued as a service, not for financial profit, to teachers, librarians and college and normal school students weekly for thirty weeks of the school year. They give timely information about boundary changes, exploration geographic developments, new industries, costumes

and customs and world progress. Each application should be accompanied by 25 cents to cover mailing costs of the bulletins during the school year.

Textbook Clinic

An outgrowth of an exhibition devoted to "The Textbook of the Future," held two years ago by the American Institute of Graphic Arts, was an auxiliary organization, the Textbook Clinic, which held its first meeting in New York last February.

This exhibit proved that experienced designers in the trade book field lacked a practical knowledge of the use of textbooks in modern schools. To promote an interest in improved textbook design, the institute arranged for the organization of a group that would devote itself exclusively to textbooks.

While the Textbook Clinic is a branch of the institute, any person interested in textbooks is eligible for membership in the clinic whether or not he is a member of the institute. Interest may come from any phase of textbook production — education, publishing, designing, editing, illustrating or writing.

For out-of-town members the clinic is now preparing stenographic transcripts of all addresses given at its meetings and copies of all material prepared by the research and format committees and copies of each issue of the *News Letter* of the institute, published six times a year.

Blanche Dexter is executive secretary of the clinic, which has headquarters at 115 East Fortieth Street, New York.

New California Directory

The California Society of Secondary Education has just completed a 380 page volume, to be published in November, containing names and teaching assignments of all secondary teachers in California for the school year 1938-39.

BUILDINGS

Facilities for Hygiene

No excuse for dirty faces and hands in New York City public schools, if Vice President Ellsworth B. Buck of the board of education has anything to say about it. He has urged that no less than $235,000 be set aside in the next school budget to buy soap and towels. It means only about 12 cents per pupil per year, he contends, and why attempt to teach children the principles of hygiene when no washing facilities are provided for them? Estimates based on the experience of two schools reveal that soap dispensers for all New York City school buildings can be procured for $80,000; that liquid soap will cost $45,000 per year; paper towels, $90,000 a year and paper towel cabinets, $20,000.

New York to Open 14 New Schools

The New York board of education will open 14 new or enlarged school buildings, providing seats for 22,240 pupils, this fall, the largest number of buildings to be opened at one time since 1930.

The new structures, costing approximately $12,000,000, are expected to relieve congestion and overcrowding in the schools with which school authorities have been grappling in recent years. The new buildings also will fit into the comprehensive planning program started by the board.

MEETINGS

Sailing Down to Rio

Rio de Janeiro, the metropolis of Brazil, will be host to teachers of the world during August 1939, according to Dr.

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Coming Meetings

Sept. 7-10—American Psychological Association, Ohio State University.

Oct. 10-14—National Association of Public School Business Officials.

Oct. 13-15—Vermont Education Association, Burlington.

Oct. 13-15—Utah Education Association, Salt Lake City.

Oct. 19-21—New Hampshire State Teachers' Association, Concord.

Oct. 20-22—Wyoming Education Association, Rawlins.

Oct. 26-28—West Virginia State Education Association, Charleston.

Oct. 26-28—North Dakota Education Association, Fargo.

Oct. 27-28—Indiana State Teachers' Association, Indianapolis.

Oct. 27-28—Maine Teachers' Association, Bangor.

Oct. 27-29—Minnesota Education Association, Minneapolis.

Oct. 27-29—Rhode Island Institute of Instruction, Providence.

Oct. 27-29—Montana Education Association, district conventions, Kalispell, Billings, Great Falls and Bozeman.

Oct. 27-29—Colorado Education Association, district conventions, Denver, Pueblo and Grand Junction.

Oct. 28—Connecticut State Teachers' Association, New Haven, Hartford and Bridgeport.

Oct. 28-29—Maryland State Teachers' Association.

Nov. 3-5—Iowa State Teachers' Association, Des Moines.

Nov. 3-4—Arkansas Education Association, Hot Springs or Little Rock.

Nov. 4-5—Conference of Food Service Directors, Rochester, N. Y.

Nov. 4-5—Kansas State Teachers' Association, Kansas City, Topeka, Salina, Hays, Garden City, Hutchinson, Wichita and Pittsburg.

Nov. 6-12—American Education Week.

Nov. 10-11—Delaware State Education Association, Newark.

Nov. 10-12—New Jersey State Teachers' Association, Atlantic City.

Nov. 14-17—National Council on Schoolhouse Construction, Frankfort, Ky.

Nov. 16-19—Missouri State Teachers' Association, Kansas City.

Nov. 17-19—Louisiana Teachers Association, Baton Rouge.

Nov. 20-23—South Dakota Education Association, Mitchell.

Nov. 22-25—Virginia Education Association, Richmond.

Nov. 24-26—Texas State Teachers' Association, Dallas.

Nov. 25-26—Idaho Education Association, Boise.

Nov. 25-26—National Council for the Social Studies, Pittsburgh.

Nov. 30-Dec. 3—American Vocational Association, St. Louis.

Dec. 27-29—Ohio Education Association, Columbus.

Dec. 28-30—Oregon State Teachers Association, Portland.

Feb. 25-March 2—American Association of School Administrators, Cleveland.

Paul Monroe, president of the World Federation of Education Associations, who has announced that the association has accepted the official invitation extended through the Brazilian government to meet in Rio.

Regular transportation services to South America will be supplemented by chartering large transatlantic liners which will be operated on a cruising basis, Doctor Monroe said. Special effort will be made to bring the cost of the journey within reach of younger teachers in modest salary brackets.

Business Officials

The National Association of Public School Business Officials will go out of the school field for one speaker at its twenty-seventh annual convention to be held at the Palmer House, Chicago, October 10 to 14.

M. A. Clark, manager of industrial and public relations of the U. S. Rubber Company, has been asked to speak on the topic, "You Are a Part of an Organization."

Lewis E. Parmenter, president of Bacon & Vincent Company, Buffalo, N. Y., and Dr. Arthur B. Moehlman, editor of The NATION'S SCHOOLS, will be key speakers at the opening meeting.

Don C. Rogers, director of the bureau of research and building survey, Chicago board of education, is to talk on selecting school sites; Hans W. Schmidt, Wisconsin State Department of Education, on school lighting; T. C. Holy, Ohio State University, on needed research in the school building field; Dr. George D. Strayer, Columbia University, on changes in the structure and administration of schools, and Raymond V. Long, Virginia State Department of Education, on financing school plant construction.

Dr. E. S. Lawler of Northwestern University will present a paper on federal relations to education; Dr. Newton Edwards of the University of Chicago and Dr. Ned Dearborn of New York University, on community relations; Paul J. Misner, superintendent of schools, Glencoe, Ill., on fiscal management, and Dr. John Guy Fowlkes of the University of Wisconsin, on extracurricular activities.

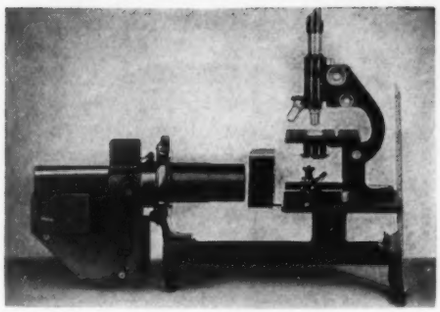
These are speakers at the general sessions. Sectional meetings will be held on Tuesday and Thursday afternoons and round table conferences, on Tuesday and Wednesday evenings.

FINANCE

Education Still Leads

Educational institutions are still the most popular field of philanthropic support, despite the sharp decline in contributions during the first six months of 1938.

This fact is revealed in a statistical report for six major cities compiled



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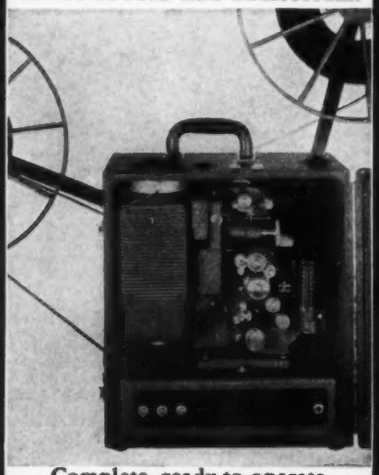

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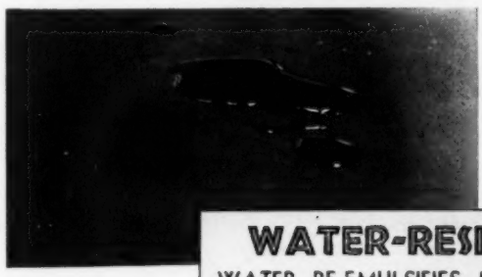

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Education is one of the fields affected by philanthropy that has suffered a loss during this period, as compared with the first six months of 1937. These institutions and organizations were given $18,932,727 during the six months' period, as compared with $77,500,915 in the same period in 1937, a loss of $58,568,188.

The total bequests publicly announced in six major cities were $50,713,219. The cities for which the gift record has been compiled are: New York, Washington, Chicago, Boston, Baltimore and Philadelphia.

Hutchins' Report

A total of $52,000,000 in gifts has been presented to the University of Chicago during the nine year tenure of Robert Maynard Hutchins as president. Only $4,250,000 of this amount was not limited to some specific purpose. That unrestricted money is the great need of the university, Doctor Hutchins pointed out recently in his first report since his appointment in 1929. The president's message was dropped during intervening years for economy purposes.

Private School Enrollments Up

Seventy-one per cent of the nation's private schools expect full enrollments this fall as compared with a 68 per cent expectation of full enrollments reported by similar schools at this time last year. The figures are based upon reports compiled from a cross-sectional survey of the nation's private schools.

Forty-six per cent of the schools surveyed expect an enrollment equal to last year's; 42 per cent expect a larger enrollment, and only 12 per cent expect a smaller enrollment. The greatest increase in the expectation of full enrollments is in girls' preparatory schools.

VISUAL EDUCATION

Twenty-Two Courses

The 11 year old cinematography department of the University of Southern California now offers twenty-two courses in its curriculum, according to an announcement made by President Rufus B. von KleinSmid.

"Beginning with scenario writing in 1927 we now include classes in television, color technic and subjects in keeping with the advance of the industry," President von KleinSmid said. "Recognition of motion pictures as an art was acknowledged when we first established courses dealing with the cultural, technical and educational phases of the industry some years ago."

Features Educational Films

A striking feature of the New York World's Fair education program will

Films for the School Screen

American History I—Colonial Period

The Chronicles of America Photoplays—Authoritative, scholarly series, made by Yale University Press, depicting important episodes of American history: Columbus, 4 reels; Jamestown, 4 reels; the Puritans, 3 reels; the Pilgrims, 3 reels; Peter Stuyvesant, 3 reels; Gateway to the West, 3 reels, and Wolfe and Montcalm, 3 reels. For rent. 16 and 35 mm., silent. Yale University Press Film Service, 386 Fourth Avenue, New York.

English Settlements in North America—Animated maps and actual scenes showing first English settlements; absorption of Dutch and Swedish colonies; contrast between English and French colonies. 1 reel. 16 mm., silent. For rent. Society for Visual Education, Inc., 327 South LaSalle Street, Chicago, or Visual Education Service, 131 Clarendon St., Boston.

French Explorations in North America—Traces main routes of French explorers, traders and missionaries by animated lines upon a map. The country is visualized through scenics. 1 reel. 16 and 35 mm., silent. For rent. Society for Visual Education, Inc., 327 South LaSalle Street, Chicago.

Three Centuries of Massachusetts—Series of eight: Colonial life, shipbuilding, etc.; 1 reel for each series. Narrated by Professor Hart of Harvard. 16 mm., sound. For rent. Bell and Howell Company, 1801 Larchmont Avenue, Chicago, and Garrison Film Distributors, Inc., 729 Seventh Avenue, New York.

French and English Struggle for North America—Animated maps showing French and Indian War; scenes of old Fort Ticonderoga, Crown Point and Lake Champlain as they are today. 1 reel. 16 and 35 mm., silent. For rent. F. C. Pictures Corporation, 505 Pearl Street, Buffalo, N. Y., and Visual Education Service, 131 Clarendon Street, Boston.

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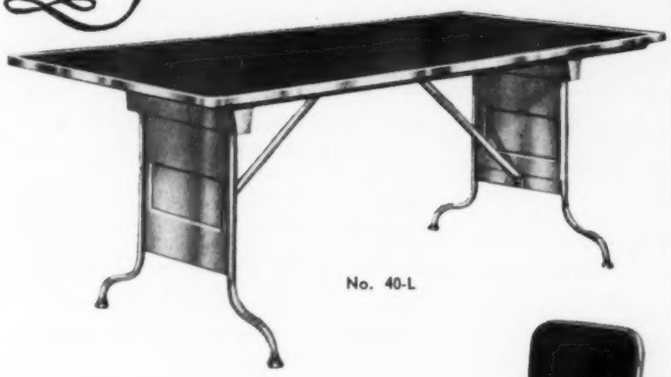

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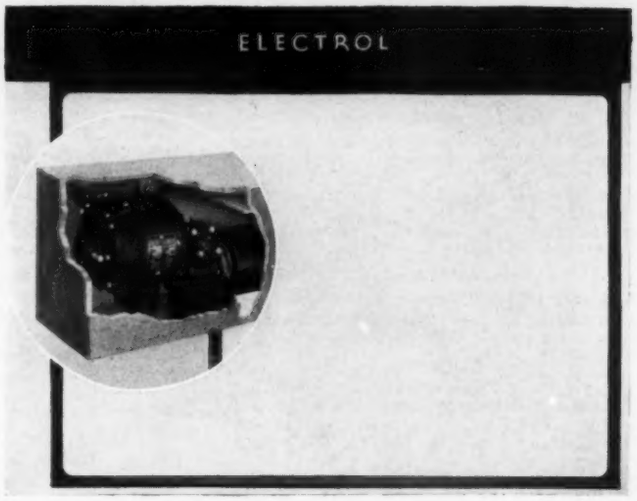

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On the Air During September

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Daylight Saving Time.

Daily

12:30-1:30 p.m.—National Farm and Home Hour (NBC Blue).[1]

Monday

5:45-6:00 p.m.—"New Horizons" sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

2:30-3:00 p.m.—NBC Music Guild (NBC Blue).

5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

Wednesday

5:45-6:00 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).

7:30-7:45 p.m.—Living History, CBS adult education series.

7:45-8:00 p.m.—Science on the March, under auspices of the American Society for the Advancement of Science (NBC Blue).

Thursday

4:00-4:15 p.m.—Of Men and Books, Prof. John Frederick of Northwestern University reviews books and interviews guest authors (CBS).

5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs. CBS adult education series.

Friday

5:45-6:00 p.m.—"So You Want to Be a ——." A child interviews representatives of various professions, i.e. reporter, policeman, sea captain (CBS).

7:15-7:30 p.m.—Music Is My Hobby (NBC Blue).

7:30-7:45 p.m.—Adventures in Science, Dr. Lawrence Kelso Frank, sociologist commentator, CBS adult education series.

Saturday

10:30-10:45 a.m.—The Chi'd Grows Up (NBC Blue).

12:00-12:30 p.m.—NBC Music Guild (NBC Red).

5:00-6:00 p.m.—Great Plays (NBC Red).

Sunday

4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institute (NBC Red).

Sept. 4—Man's Battle Against Disease.

Sept. 11—The Value of Lead.

Sept. 18—The Development of American Army and Navy Uniforms.

Sept. 25—The Story of Fur Bearing Animals.

6:00-6:30 p.m.—Music for Fun (CBS).

8:00-8:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

10:30-11:00 p.m.—University of Chicago Round Table (NBC Red).

[1]Except Sunday.

be a series of demonstrations of the place the motion picture is making for itself in education. In addition to pictures made solely for educational use, there will be edited versions of Hollywood and other commercial productions approved by a nationwide committee of educators.

Publishes Proceedings

The National Conference on Visual Education and Film Exhibition has announced that it will publish a book of proceedings for its membership. The book will consist of about 130 pages, containing the addresses given at this year's meeting, and a year book section, including a complete list of films shown at the conference during the last three years. Copies may be obtained through A. P. Hollis, director of the conference, at 1111 Armitage Avenue, Chicago, at a small charge.

RADIO

From Guatemala City

Station TGWA of Guatemala City, Guatemala, Central America, is planning to present this autumn a series of broadcasts, using a directional transmitter. The hour will be 3 p.m.

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(E.S.T.) on Wednesdays from October 5 to January 24. The series, at the beginning at any rate, will have the English first and the Spanish version second. Pupils, even with good Spanish preparation, profit more in the early stages of listening by hearing the English first, and then Spanish, according to William S. Hendrix of Ohio State University, who recently has completed a study of short wave reception under a grant from the Rockefeller Foundation.

Third Edition

Along with the announcement of publication of the third edition of a script catalog, listing 181 radio scripts available to educational groups through the Educational Script Exchange, are statistics showing the wide use of the exchange. In less than two years schools and colleges in 42 states have produced more than 3000 radio programs using scripts supplied by the exchange, according to the U. S. Office of Education.

"People's Platform"

Unrehearsed views of the butcher, the baker, the candlestick maker — in short, people from all walks of life — will be heard from 7 to 7:30 p.m. (EDST) over the network of the Columbia Broadcasting System during the coming season in an informal forum to be known as "The People's Platform." Diverse views on the unemployment situation will be brought out by Lyman Bryson, professor of education at Teachers College, Columbia University, and director of the C.B.S. adult education board, who will serve as moderator.

NAMES IN NEWS

Superintendents

MAYNARD W. LINN, assistant superintendent of schools at Greenwich, Conn., has been promoted to the superintendency. He has been in the Greenwich system since March 1933.

L. L. PATE recently was elected superintendent of schools in Butte, Neb.

OSCAR F. KERLIN was appointed superintendent of schools in Elmira, N. Y., recently.

EMMA NEAL, assistant superintendent of schools in San Antonio, Tex., is reported to be favored for the post of superintendent, succeeding J. CHESTER COCHRAN, who has resigned. Mr. Cochran will retain the position of superintendent until his successor is appointed.

FOX D. HOLDEN, principal of Governor Clinton School of Poughkeepsie, N. Y., has been appointed superintendent of Poughkeepsie schools.

WILLIAM F. VOGEL, Indiana director of federal emergency education for the last three years, has been named superintendent of schools at Jeffersonville, Ind., for a three year term.

GEORGE C. FRANCIS has resigned as superintendent of schools, Chelsea, Mass., to become head of the school system at Fitchburg, Mass. LEO P. CASEY, for the last eighteen years a member of the faculty of Shurtleff School, Chelsea, and for the last nine years its headmaster, was elected superintendent of schools in Chelsea.

CHARLES E. HAWKES, superintendent of schools at Oberlin, Kan., for the last five years, has been named superintendent of schools in Salina, Kan., to succeed W. S. HUESNER, retiring.

FRANCIS W. GANT has been named superintendent of schools at Hyatts, Ohio.

DONALD W. DUNNAN has been elected superintendent of schools at Burlington, Mass. He also will serve as headmaster of a new $150,000 junior-senior high school now nearing completion.

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L. V. Stockard, supervisor of high schools, Dallas, Tex., has been elected assistant superintendent of the Dallas schools, succeeding the late E. B. Cauthorn. Julius Dorsey, supervisor of elementary schools, was advanced to the high school post.

Arley F. Rost of Arvada, Colo., has been named superintendent of schools at Hugo, Colo.

Ray C. Miller will be chosen assistant superintendent of schools in Cleveland in charge of personnel, it has been reported by the *Cleveland Press*. Mr. Miller will step into the administration of schools through the advancement of Earl J. Bryan, present assistant superintendent in charge of personnel, to the position of assistant superintendent in charge of high schools. The latter post will be vacated by H. A. Bathrick, who is retiring at the 65 year age limit.

Howard D. Fowlie of Monroe, Me., is the new superintendent of the school union comprising the towns of Brooksville, Castine, Islesboro and Penobscot, Me.

R. V. Lindsey, former principal of the Pekin Community High School, Pekin, Ill., recently was appointed superintendent of schools at Galesburg, Ill.

Dr. Charles R. Stone, superintendent of Munhall schools, Munhall, Pa., for twenty-two years, has been succeeded by E. O. Liggett, superintendent of schools at Crafton, Pa.

Max Lamar Price has been chosen to succeed H. S. Defenbaugh as superintendent of schools, West Liberty, Ohio.

Harry G. Mahon, superintendent of schools at Turner, Kan., for the last five years, has resigned to accept the position as superintendent of the Decatur County High School and the grade schools at Oberlin, Kan.

Edwin Baum Long, supervising principal of schools, Millersburg, Pa., has been elected superintendent of borough schools at Mechanicsburg, Pa., to fill the unexpired term of the late Roy L. Van Scoten.

Principals

Thomas J. Quirk, principal of the Burr Junior High School, Hartford, Conn., has been elected principal of the Hartford High School.

Marlin U. Zimmerman, principal of the high school at Rising Sun, Md., for nine years, has resigned to accept the principalship of the high school at Easton, Md. He will succeed Ben S. Carroll, who resigned to accept the position of principal of Bel Air High School, Bel Air, Md.

Mrs. Francis R. Meder of Danbury, Conn., has been named principal of the new Brookfield Consolidated School at Brookfield, Conn.

Charles E. Davis, principal of the high school at Bucyrus, Ohio, for the last two years, has been named principal of the South High School, Lima, Ohio. Edwin Gearhart, assistant principal, was named principal of the Bucyrus High School.

Dr. Thomas L. Nelson, principal of Yuba City Union High School, Yuba City, Calif., has been appointed principal of Kern County Union High School, Bakersfield, Calif.

Daniel W. Dedrick, supervising principal of Bedford Junior High School, Westport, Conn., has been named principal of the Arsenal School at Hartford, Conn.

E. W. Tiffany has resigned as principal of the Springfield High School, Springfield, Ohio.

Emil F. Rolzhausen has been named principal of McKinley School, North Bergen, N. J.

Carl Secor, principal of the East Stroudsburg High School, East Stroudsburg, Pa., has been elected supervising principal of the city schools.

Father John J. Foley, S.J., has been appointed principal of Marquette University High School, Milwaukee, suc-

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FRANK F. OTTO, supervising principal of the Downey Union High School, Downey, Calif., for the last fifteen years, and C. C. CARPENTER, head of the schools at Paso Robles, Calif., for four years, will exchange positions.

SUPT. C. T. PROSE of Zanesville, Ohio, recently was named principal of Hancock Junior High School, Zanesville.

RICHARD PRINCE HODSDON has been named principal of the senior high school at Gorham, Me., to succeed CHARLES B. SHAW, principal for the last twenty-four years.

FRANK EARLEY has been appointed principal of the high school at Pittston, Pa.

ROBERT H. BLACK, principal of the Old Greenwich School, Greenwich, N. Y., has been made principal of the Noah Webster High School, Hartford, N. Y.

ERNEST BROWN, principal of the Sharon High School, Sharon, Mass., has resigned to accept the position as principal of the Robert E. Fitch School at Groton, Conn.

A. S. HUNT of Asheboro, N. C., has been elected principal of the high school at Silver City, N. C.

STUART C. CHAPLIN has been elected principal of the Washburn High School, Washburn, Me.

CHARLES L. FOX was named principal of the senior high school at Springfield, Ohio, to succeed EARL W. TIFFANY, who resigned.

MARGARET HAGGERTY has resigned as principal of the Howland Avenue School, North Adams, Mass., because of her approaching marriage. She has been principal at the school for the last five years.

ALBERT C. ENDEE, principal of Old Lyme Junior High School, Old Lyme, Conn., has accepted the principalship of the high school at Glastonbury, Conn., to succeed JOHN W. GOODRICH, who resigned to accept an appointment as principal and superintendent at Portland, Conn.

LESLIE BENDER, high school vice principal, has been appointed principal of Edison Junior High School, West Orange, N. J., succeeding VINCENT GEIGER, who resigned to become supervising principal at Verona, N. J.

In the Colleges

DR. RAYMOND ROSS PATY, former director of fellowships for the Julius Rosenwald Fund, has been named president of Birmingham-Southern College, Birmingham, Ala. His successor in the Rosenwald post is DR. GEORGE M. REYNOLDS, Mississippi director of the U. S. Farm Security Administration.

REV. DR. EVALD B. LAWSON is the new president of Upsala College, East Orange, N. J. Doctor Lawson, who was graduated from Upsala in 1925, will begin his duties December 1.

C. C. SWAIN, for the last fifteen years president of the State Teachers College at Mayville, N. D., has been appointed president of the State Teachers College at Minot, N. D., to succeed the late GEORGE A. MCFARLAND.

DR. HARRY MEANS CROOKS, president of Alma College, Alma, Mich., for the last twenty-two years, has been named president of Pikeville College, Pikeville, Ky.

DR. ROBERT L. MCLEOD JR., secretary of the board of missions of the Presbyterian Church in the United States, was elected president of Centre College, Danville, Ky., recently.

DR. J. A. KELLER will be inaugurated as president of Florence State Teachers College, Florence, Ala., on October 1.

DR. HERBERT HAZEL of the Indiana University physics department has been named head of the Ashland Junior College, Ashland, Ky.

PROF. J. W. BRANSON, head of the mathematics department of New Mexico College of Agriculture and Me-

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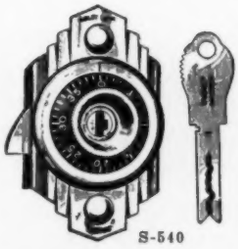

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chanic Arts, State College, has been named acting president of the institution to succeed DR. RAY FIFE, who resigned recently to do research work at Ohio State University.

DR. THEODORE A. SIEDLE, assistant dean of the school of education at the University of Pittsburgh, has been appointed dean of instruction at California State Teachers College, California, Pa.

DR. C. H. JAGGERS, head of the department of psychology, Southwestern Louisiana Institute, Lafayette, La., was named director of the training school of Western State Teachers College, Bowling Green, Ky. He succeeds W. L. MATTHEWS, who has become a member of the executive staff of the Bowling Green Business University.

J. M. CLAUNCH, superintendent of schools, Salem, Tex., has resigned to accept a post on the faculty of Southern Methodist University, Dallas, Tex.

DR. JAMES HAROLD FOX, associate professor of education, George Washington University, has been promoted to the deanship of the school of education.

THEODORE FENSKE has been appointed assistant professor at the college of education of the University of Minnesota and superintendent of the West Central School and Station at Morris, where he has served as instructor since his graduation in 1929.

Miscellaneous

DR. BEN M. CHERRINGTON, director of the Foundation for the Advancement of Social Sciences at the University of Denver, has been granted a year's leave of absence to accept a position as head of the newly created division of cultural relations of the Department of State, Washington, D. C.

HALE STURGES, headmaster in Prospect School, New Haven, Conn., has been made headmaster of Park School, Cleveland.

DR. WALTER CROSBY EELLS, professor of education at Stanford University, has been named executive secretary of the American Association of Junior Colleges with executive and research headquarters at Washington, D. C.

DR. DONALD W. CAMPBELL of Downingtown, Pa., has been appointed adviser in the division of child accounting and research in the Pennsylvania Department of Public Instruction. The vacancy was created by the promotion of DR. CARL D. MORNEWECK to the office of chief of the division.

R. G. JONES, director of guidance, Cleveland public schools, will retire August 31. Mr. Jones went to Cleveland as deputy superintendent in 1917. He was appointed superintendent, holding the position until 1933. Since then he has been, first, director of high schools and, more recently, director of guidance.

Deaths

WARREN J. YOUNT, superintendent of schools, Bedford, Ind., since 1932, died in an Indianapolis hospital following an operation. HARRY H. MOURER, for the last eight years principal of the Bedford High School, was named his successor. At the time of his death Mr. Yount was president of the Indiana Schoolmen's Club.

MAJOR JOHN EDWARD BORDEN, principal of Mohegan Lake Academy, Lake Mohegan, N. Y., died recently. Major Borden opened Mohegan Lake Academy in 1935 on the site of the old Mohegan Lake School, one of the largest preparatory schools in the East, which closed five years ago.

DONALD C. MACLEAN, administrative assistant of Erasmus Hall High School, Brooklyn, N. Y., died at the age of 52 years.

DR. GEORGE M. FALION, director of Townsend Harris High School, New York, died after a brief illness.

DR. R. E. BLACKWELL, president of Randolph-Macon College, Ashland, Va., died at the age of 83 years.

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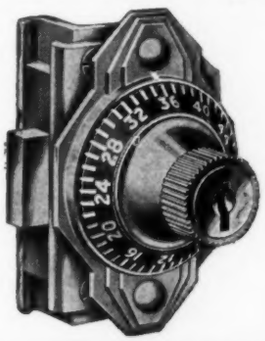

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THE BOOKSHELF

THE STRUCTURE AND ADMINISTRATION OF EDUCATION IN AMERICAN DEMOCRACY. *Washington, D. C.: Educational Policies Commission,* 1938. *Pp.* 128. $0.50.

Significant statement of policies that should govern public education in the United States. Every teacher and administrator should read this document carefully.

THE ADMINISTRATION OF CANADIAN CONDITIONAL GRANTS. *A Study in Dominion-Provincial Relationships. By Luella Gettys. Chicago: Public Administration Service,* 1938. *Pp.* xiii+193. $2.75.

Description of how the Dominion of Canada's federal subventions work, with some observations concerning the possibility of improvement of administrative technics.

ALL ABOUT MINING. *By Wallace H. Witcombe. Illustrated. New York: Longmans, Green and Co.,* 1938. *Pp.* xi+268. $2.50.

The story of mining simply told; valuable for general reading in early secondary school.

THE AMERICAN LEGION AS EDUCATOR. *By William Gellermann. Contributions to Education, No.* 743. *New York: Bureau of Publications, Teachers College, Columbia University,* 1938. *Pp.* ix+280. $3.15.

An educationist looks at the American Legion and finds much that is disturbing to democracy in both its program and its activities.

EDUCATIONAL STATISTICS. *By James E. Wert. First Edition. McGraw-Hill Series in Education. New York: McGraw-Hill Book Company, Inc.,* 1938. *Pp.* xii+305. $3.25.

Statistical interpretation built around specific educational problems. Should prove valuable and usable to educators and students.

THE SEVEN SOVIET ARTS. *By Kurt London. New Haven: Yale University Press,* 1938. *Pp.* xv+381. $4.

Survey of the fine arts, the theater, music, literature, the opera, the ballet, moving pictures and architecture in Soviet Russia from both a theoretical and realistic standpoint by a capable author. Decidedly worth reading.

CASTAWAY BOATS. *By Captain Victor Slocum. Illustrations by Charles Rosner. Maps by the Author. New York: Lee Furman, Inc.,* 1938. *Pp.* 311. $3.

Collection of fascinating tales of unusual and supernormal feats by sailors of all nationalities. A book that every adolescent—to say nothing of every adult still capable of thrilling to stories of superhuman effort—will want to read.

THE STORY OF MUSICAL INSTRUMENTS. *From Shepherd's Pipe to Symphony. By H. W. Schwartz. Illustrated. Garden City: Doubleday, Doran & Company, Inc.,* 1938. *Pp.* xii+365. $3.50.

Much needed history of the evolution of musical instruments so written that a layman can easily appreciate their development and current merging into a symphonic whole. Highly desirable for the secondary school musical and fine arts libraries.

OUR COUNTRY, OUR PEOPLE, AND THEIRS. *By M. E. Tracy. Illustrations by Richard E. Falconer. New York: The Macmillan Company,* 1938. *Pp.* 120. $1.75.

Unusual brief but pointed comparisons between Germany, Italy, Russia and the United States in terms of resources and governments. Essential for every high school reference library.

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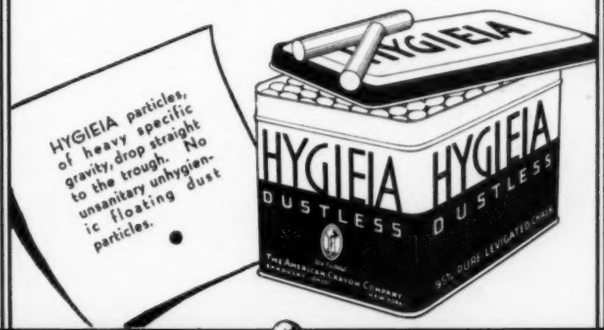
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NEWS MAP OF THE WEEK
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A DEMOCRATIC PHILOSOPHY. *By Wendell Thomas. New York City: Correlated Enterprises,* 1938. *Pp.* 148. $1.50.

A philosopher seeks to synthesize the contributions of Dewey, Marx and Sankara for the development of a more inclusive democratic philosophy. Has the additional merit of being easy to read.

THE IOWA PUBLIC JUNIOR COLLEGE: ITS ACADEMIC, SOCIAL, AND VOCATIONAL EFFECTIVENESS. *By Malcolm A. Love. University of Iowa Studies in Education, Vol.* 10, *No.* 3. *Iowa City: University of Iowa,* 1938. *Pp.* 127. $1 *(Paper Cover).*

An examination and appraisal of the junior college as it is developing in Iowa.

Just Off the Press

BEFORE HOMER. *A Boys' Story of the Earliest Greeks. By DeWolfe Morgan. New York: Longmans, Green and Co.,* 1938. *Pp.* viii+261. $2.

AZTEC DRUMS. *By Alice Alison Lide. Illustrations by Carlos Sanchez M. New York: Longmans, Green and Co.,* 1938. *Pp.* 142. $1.50.

FROM SNOW TO SUN. *A Mystery Story for Boys. By R. J. Burrough. New York: Longmans, Green and Co.,* 1938. *Pp.* 227. $1.50.

GREGG SPEED BUILDING. *By John Robert Gregg. New Revised Edition. With Sixteen Lessons on the English of Business, by E. L. Hutchinson. New York: The Gregg Publishing Company,* 1938. *Pp.* v+314. $1.20.

MILK PRODUCTION. *By Josephine Perry and Celeste Slauson. New York: Longmans, Green and Co.,* 1938. *Pp.* 119. $1.50.

THE GOLDEN SPEARS. *And Other Fairy Tales. By Edmund Leamy. New York: Longmans, Green and Co.,* 1938. *Pp.* ix+169. $1.50.

PERSIMMON CREEK. *By Nellie Page Carter. Illustrated by Alice Caddy. New York: Longmans, Green and Co.,* 1938. *Pp.* ix+277. $2.

PEDRO'S COCONUT SKATES. *Written and Illustrated by Esther Wood. New York: Longmans, Green and Company,* 1938. *Pp.* 191. $1.50.

REBELS IN BONDAGE. *By Ivy Bolton. Illustrations by Amy Hogeboom. New York: Longmans, Green and Co.,* 1938. *Pp.* ix+234. $2.

VOCABULARY BOOKLET IN THE SOCIAL STUDIES. *For Junior and Senior High Schools. With Pupil Meanings and Examples, Markings, Activities, Testing. By John P. Dix. Revised Edition. Kansas City, Mo.: The Author,* 220 *North Clinton Place,* 1938. *Pp.* 120. $0.60 *(Paper Cover).*

THE SONG OF ROLAND. *Translated by Merriam Sherwood. Illustrated by Edith Emerson. New York: Longmans, Green and Co.,* 1938. *Pp.* xxiii+168. $2.

HIGHWAY PAST HER DOOR. *By Mary Wolfe Thompson. Illustrations by Vera Neville. New York: Longmans, Green and Co.,* 1938. *Pp.* x+235. $2.

LITTLE CUMSEE IN DIXIE. *By Halsa Alison Kyser. Illustrated by Erick Berry. New York: Longmans, Green and Co.,* 1938. *Pp.* 158. $1.50.

EXPERIMENTING TOGETHER. *The Librarian and the Teacher of English. By Frieda M. Heller and Lou L. La Brant. Chicago: American Library Association,* 1938. *Pp.* 84. $0.75 *(Paper Cover).*

LITTLE MAGIC PAINTER. *A Story of the Stone Age. Written and Illustrated by Muriel H. Fellows. Philadelphia: The John C. Winston Company,* 1938. *Pp.* 112. $2.

OUT OF A CLEAR SKY. *By Merritt Parmelee Allen. New York: Longmans, Green and Co.,* 1938. *Pp.* vii+225. $1.50.

VOCATIONS IN FICTION. *An Annotated Bibliography. Compiled by Mary Rebecca Lingenfelter. Second Edition. Chicago: American Library Association,* 1938. *Pp.* 99. $1.25.

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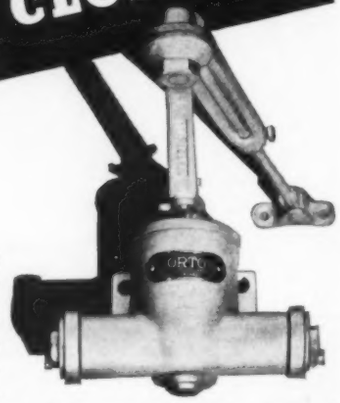

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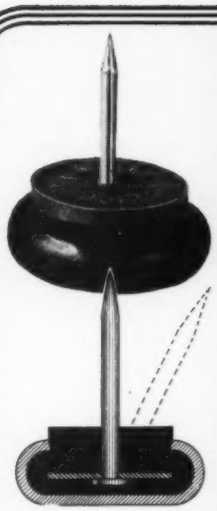

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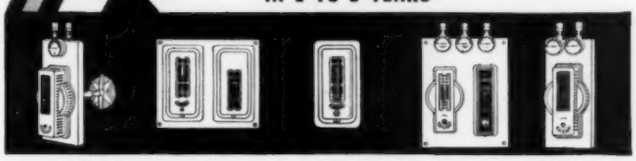

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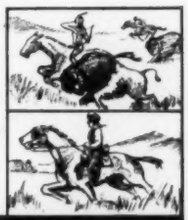

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NOTES FOR BUYERS

Fashions in Furniture

Looking over the new fall fashions in school furniture, we note that tablet-arm attachments are the latest thing in accessories for steel folding chairs by Lyon Metal Products, Incorporated, Aurora, Ill. The attachment is said to provide an economical and practical solution for permanent or extra seating where the user also needs a rigid roomy place to work.

The tablet-arm attachment can be used with any Lyon chair. It is quickly and firmly attached by two clamps with large anchored wing nuts and can be easily removed when necessary.

The tablet board is made of five ply birch in brown finish. The steel supporting frame is finished to match your chair color scheme.

Plumbing on Parade

The plumbing parade for the new school season gets off to a flying start with Imperial Brass Mfg. Co., 1200 West Harrison Street, Chicago, heading the procession with a new 24 page catalog of modern plumbing fixtures. The booklet deals principally with Watrous flush valves, describing, illustrating and identifying 38 different combinations.

Another feature of the catalog is a description of the Imperial vacuum breaker, which is said to be adaptable to all types and makes of bowls and flush valves.

The last two pages of the catalog are devoted to soap dispensers in all shapes and sizes, either of the hand or foot operated variety.

In the Concrete

"Dust thou art to dust returneth"; school custodians who spend a great deal of time combating dust are not likely to forget it.

An ally for the custodian in the war on dust, however, is the Truscon Flor-Dye system, a new treatment for coloring and dustproofing concrete floors.

In presenting this system, the Truscon Laboratories, Detroit, feel that they have made a contribution to the preservation of concrete flooring.

The treatment, according to the manufacturers, does not form a surface film but penetrates, becoming an integral part of the cement surface. For this reason, it is said, the dye does not wear off easily, nor does it peel, chip or crack. It must, however, be used over an unpainted surface.

Flor-Dye is claimed to be especially applicable to all forms of cement surfaces (as well as porous tile) where it is desired to color the surface, seal it and make it nondusting.

Lilliputian Lighting

By way of dispelling the fog that enshrouds the subject of school lighting, General Electric at Nela Park, Cleveland, has constructed miniature schoolrooms to demonstrate correct lighting.

The ingenious miniature rooms are 38 by 30 inches, portable, and designed to withstand the rigors of shipment. Equipped with miniature desks, chairs, blackboards and lighting fixtures, each room weighs 260 pounds.

Tiny semi-indirect lighting fixtures are suspended in two rows of three each from the ceiling of each room. Five light meters resting atop the five rear seats show that the amount of light in the midget room is equal to that delivered by 500 watt fixtures in

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The miniature schoolrooms may be purchased or rented, with five light meters, on a weekly basis through any of the G-E incandescent lamp department's 17 sales divisions.

Lightning Change

Add new competition for quick-change artists. Signor Selectroslide, the product of Spindler and Sauppe, Inc., San Francisco, establishes a record for the profession with 48 changes in two minutes and twenty-four seconds flat.

Speedy changing is only one of the talents of Selectroslide, an answer to a demand for apparatus to handle automatically the changing of 2 by 2 inch slides for projection. It consists of an electrically driven mechanism contained in a drum-shaped housing of cast aluminum finished in black crystal lacquer. It carries an interchangeable turret or magazine holding 48 slides in numbered slots and arranged radially. A bracket secures it to the projector for which the Selectroslide was designed.

With the apparatus secured to the projector, the magazine is placed in position on a turn table with slide No. 1 opposite the slide frame of the projector. When it is plugged into an electric outlet and the dial set for the desired period of observation (fast or slow) a toggle switch is moved to "on" and the operation becomes entirely automatic.

Master of Coal

The master cracks his whip and the fire genie obediently goes through his paces. The master in this case is an underfeed stoker which its maker, the Kol-Master Corporation, Oregon, Ill., feels is capable of mastering practically any heating problem.

In a 24 page illustrated book, known to the trade as Catalog 300, is presented the life history of the Kol-Master. In addition, there are photographs and diagrams showing various features of design, construction and operation covering the entire line of the company, ranging from 30 pounds to 1600 pounds per hour capacity.

Another publication of this company is an eight page booklet covering Kol-Master "S" models for Scotch Marine and other long low narrow firebox boilers and furnaces.

Generalities

A development of interest is the announcement of the establishment by the American Crayon Company of a branch office in Chicago, located at 1483 Merchandise Mart. Customers in this area will now be served by ADRIAN L. BIDDLE, R. K. EVERSOLE and EBEN DUNLAP.

The American Crayon Company also has made a change in the location of its eastern headquarters. Since June 15 the New York City address of this firm has been 9 Rockefeller Plaza. WILLIAM J. CALHOUN is manager in charge of the eastern department. . . . A silver loving cup, awarded for the outstanding exhibit of club work by a member club of the National Student Graphic Arts Society, was presented on July 1 at the annual convention of the National Graphic Arts Education Guild. Donoted by the American Type Founders, Elizabeth, N. J., the cup will become the permanent possession of the first club to win the award twice. The students' club is an honor society of pupils now enrolled in printing departments in schools throughout the country. There are 80 clubs enrolled.

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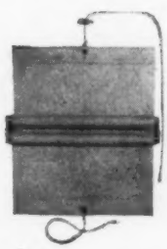

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IN A town of 23,000 one specialist in speech, with the cooperative effort of teachers, parents and children, was able in two years to decrease the percentage of school children with speech deficiencies from 18.1 to 3.6. From such a striking result one gets a vision of what a program for speech improvement could do for all the children within a school system with comparatively little additional effort and expense.

When we reflect on the economic handicap of noticeably defective speech and the social handicap of an unpleasant voice, poor diction and the inability to express oneself easily and clearly, it seems high time for the schools to do more than they have been doing in the way of corrective speech.

Ollie L. Backus, chairman of the department of speech, Slippery Rock, Pa., will tell in the November number of the accomplishments of a speech specialist in a Middle Western community. A secondary gain was that the program, ostensibly assigned for children, caused the teachers to become conscious and concerned in regard to their own speech habits.

NOW that P.W.A. funds are being poured into school construction, more than normal interest may be attached to a strong series of articles to start in November. Warren S. Holmes, architect of Lansing, Mich., is to consider classrooms designed to serve a modern curriculum, classrooms to which clings no trace of cold institutional atmosphere.

Logically the first type of classroom he will discuss is the kindergarten. Charming photographs and floor plans, together with pen sketches of a built-in kitchenette case, compartment case and

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seat, will accompany the November article, the illustrative material coming fresh from the kindergarten of the new Washington School, St. Joseph, Mich.

IN THE modern school pupils are expected to work together and to adjust their differences. Can teachers do as much?

We can name three, a trio from Detroit, who decided to do some cooperative teaching in a seventh grade class. English, social studies and the library departments were represented in their experimental program. It is hard to tell who learned more, the teachers from working together or the pupils from following the joint plans of their teachers. The three participants also have cooperated on an article describing their program, to be presented in November. They are Florence D. Cleary, Thelma Hurd and George L. Miller, all of the Hutchins Intermediate School.

HOW much participation in administration is permitted the teachers in a modern school system? How many superintendents are making an honest effort to mitigate the hierarchic organization of our American schools by a liberal extension of democratic principles?

In the November issue Supt. James Spinning of Rochester, N. Y., will give the prerequisites of teacher participation in administration, as he sees them. Teachers do not envy the superintendent his headaches, but they want him to be sympathetically aware of theirs.

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ADVERTISING PAGES REMOVED

LOOKING FORWARD

Federal Control

THE committee on resolutions of the National Education Association wisely made federal aid for education the No. 1 resolution at the meeting of the representative assembly in July 1938. It states: "The National Education Association recommends increased federal participation in the support of public education without federal control of educational policies."

The Educational Policies Commission, representing not only the N.E.A. but also the American Association of School Administrators in its recent monograph entitled "The Structure and Administration of Education in American Democracy," chapter 4, repeatedly warns against the undesirability of federal control of educational policy and the actual danger of such control at present. The hope also is expressed that greatly increased federal aid for education may be given without the dangers of federal control.

This desire appears to be more in the field of wishful thinking than in recognition of the grim realities of federal politics. It is almost a certainty that increased federal control will follow increased federal participation in support.

Both statements calling attention to the very present danger of increased federal control of public education are excellent. They should be carried into complete effect by the executive authority of the National Education Association which is now vigorously sponsoring the Harrison-Thomas Bill. This bill, most dangerous to the control of public education by the several states, is in direct opposition to both the resolution of the representative assembly and the report of the Educational Policies Commission. Those responsible for its promulgation and its active support should think twice before they back a legislative measure that will probably have greatly unforeseen effects on the entire character of public education.

It is true that its total effects will not be immediately apparent. It took a decade in some states and twenty years in others before the heavily restrictive effects of Smith-Hughes legislation began to change the character of the American one-way school system. With this precedent established it may not require even this brief period of time before increasing federal controls are definitely operative.

To be consistent with the resolution and wise policy stated, the executive personnel of the National Education Association should insist on a complete revision of the Harrison-Thomas Bill before urging its enactment at the next session of Congress.

Need for Buildings

WHILE much emphasis has rightfully been given during the depression period to undesirable reductions in operating budgets, too little attention has been given to physical plant requirements. A recent survey of building conditions and needs, published by the Office of Education as Bulletin No. 35, 1937, gives a startling picture of public school building needs in the United States.

Reduced to its simplest terms, the several states expended an average of $15.27 during the 1922-28 period, $14.44 in 1930, $8.03 in 1932 and only $2.24 in 1934. Since then, although complete data are not yet available, the expenditures for the physical plant have been on the increase but they are still far below actual requirements. The current year, if P.W.A. and W.P.A. grants continue, promises to be the best since 1930, but there is as yet little assurance that next year will continue at the same level.

The needs today may be stated as: (1) progressive replacement of practically 40 per cent of the present school plant including buildings that are obsolescent educationally and structurally, (2) elimination of manifest fire hazards, (3) provision for adequate schools necessary as a result of desirable school district reorganization, (4) new buildings in growing areas and (5) development of new secondary schools and additions to others to care for the increased demands in the thirteenth and fourteenth years. A conservative estimate requires an average annual expenditure during the next decade of at least half a billion dollars to meet reasonable school plant needs.

The real difficulty in the path of this essential plant extension is not lack of recognition of need but rather a sensible program for financing it. The conventional attitude toward school building requirements is satisfaction of need through local district borrowing. However, one of the lessons learned during the depression period has proved that this practice is most unsatis-

factory and in most instances, highly undesirable. The typical local district is too small for a pay-out-of-current income policy and the accumulation of a large debt burden merely tends to handicap the current program during periods of restricted finance.

Administrators and boards of education need to study carefully the full implications of the conventional borrowing policy to see its weaknesses.

It is our thesis that credit should be reserved to finance current expenses during depressions. School plant extensions and replacements should be provided by the state as a whole and not by local districts. The total demands of the typical state are such that it is easier to raise the necessary annual funds by taxation and distribute them according to survey-determined local needs than under more conventional procedures. It is in this area that the federal government can be of the greatest immediate aid in subsidizing state effort. Federal subventions for school plant will fit logically into a continuing public works policy and also will ensure the development in all states of greater building adequacy. Federal subventions for buildings also possess the real merit of carrying with them the smallest possible federal control of educational programs. A federal appropriation of $250,000,000 for a ten year period plus a similar amount raised by general taxation in the several states would give rational stability to school plant extension and would assist materially in the relief of currently undesirable building conditions and actual shortage of safe facilities.

The greatest possibility for relief is the intelligent support by administrators of the Schwellenbach Bill for school plant aid during the next session of Congress.

Individual Lockers

THE problem of administering pupils' wraps in the elementary schools and wraps and books under the departmentalized programs of the secondary schools is one that may cause much annoyance and even community bad feeling. One of the problems that create major conflicts between school and home is occasioned by the stealing of books and supplies.

The dual use of lockers is not conducive to improved control over this condition. It is apparent to most building principals that the easiest method of control is through individual lockers equipped with locks that are not easily picked. The tendency in recent years, therefore, has been toward a type of lock that is not controlled by keys. While the use of the individual locker is extremely helpful, it should not be considered as the complete solution. Much educational effort will be necessary to overcome certain communal attitudes toward other children's books, pencils, papers and wraps.

In the interests of economy a number of schoolmen are reverting to the older idea of one locker for every two children. This practice may have something in its favor in certain types of elementary schools but it certainly has little merit in the secondary field. In terms of operating difficulties individual lockers are a much greater economy. The locker problem is one in which a slightly larger initial outlay will more than pay for itself by the reduction of a conflict-breeding condition.

Robinson G. Jones

ROBINSON GODFREY JONES, superintendent of the Cleveland public schools for sixteen years, died in August, a few months before his sixty-eighth birthday. Failing health caused his retirement from the heavy duties of the superintendency in 1935. His successor, Charles H. Lake, offered him an assistant superintendency in charge of special education and he served in this position until June 1938. He died August 19.

Starting as superintendent at Gibson City, Illinois, in 1905, he spent forty years in public school superintendencies, including Lexington, Hammond, Kewanee and Rockford, in addition to Cleveland. He went to Cleveland as deputy superintendent during the World War and almost immediately was required to serve as superintendent when Supt. Frank E. Spaulding went abroad to serve with the A.E.F. Upon the resignation of Doctor Spaulding in 1919, he was quickly chosen superintendent and his Cleveland career covered the very dynamic postwar period in urban administration.

As superintendent, R. G. Jones' major interest was in personnel. He believed rightfully that the success of any school system depends upon the degree of ability in the teaching personnel and his major efforts were devoted to improving all areas. He had many quaint notions about how personnel should be chosen and the outstanding physical characteristics that were correlated with success. Disinterested observers felt that he really picked people by playing "hunches," but Doctor Jones always maintained that his methods were highly scientific.

Some of his prejudices, which he claimed were based on careful judgment, produced peculiar results. As an example, he had an ingrained prejudice against redheaded people. When lecturing upon his favorite theme song, "How to Pick Superior Teachers," he was often carried away by the enthusiasm of the moment and the local committee frequently had trouble explaining to reporters exactly what the doctor was trying to say. If the reporter got away first, there were usually some good feature stories that brought a lot of protesting fan mail.

Regardless of whether Doctor Jones used "science" or "hunch" in making his selections, the fact cannot be denied that he picked many able men, particularly for staff positions. Among those who worked with

him during part or all of his administration and later attained national prominence may be included: Dr. W. W. Theisen, Charles H. Lake, the late Frank G. Pickell, Dr. George E. Carrothers, Dr. Ambrose Suhrie, Dr. Clyde R. Miller, Frederick E. Clerk, Charles W. Hunt, William L. Connor and C. C. Tuck.

As a person R. G. Jones was a redhaired and very high-strung individual. He thought and acted quickly. His idea of strategy was a continuing offense. It was rumored that his profound prejudice against redhaired teachers arose from self-appraisal of his own personality but it is probably much more certain that it grew out of some experience with an unusually firm character who had hair that matched his own.

Tremendously tense, he never appeared to relax either at work or at play. He played golf with the same terrific drive that he used at the office. He drove his car through crowded traffic in a way that brought his more sensitive and nervous guests to the verge of prostration. He was a man of peace with an unusual love for battle.

Doctor Jones was active for many years in the then Department of Superintendence, helped organize the postwar intercity conference of superintendents and was a member of the Cleveland conference.

If Doctor Jones could have his way, he would probably like to be remembered for his contributions to the improvement of teaching. He wrote a great deal about his favorite topic and from these we choose for reproduction his favorite original Christmas card.

GREAT TEACHERS

GREAT TEACHERS, born or made, have certain Characteristics in common. The most striking are:
VITALITY that yields POWER
INTEREST that stimulates ACTION
EDUCATION that represents an INTELLECT
PRODUCING KNOWLEDGE,
ACQUIRING WISDOM,
and ARRIVING AT UNDERSTANDING
SINCERITY that banishes FEAR and inspires RESPECT
KINDLINESS that disarms SUSPICION and creates GOOD WILL
A SENSE OF HUMOR that relieves TENSION and restores PROPORTION
SIMPLICITY that is the HALLMARK OF DISTINCTION
GREAT TEACHERS need no introduction
Their work proclaims them.
R. G. Jones

The Teacher Feels

FROM at least six states reports have been received from teachers questioning the professional propriety of accepting a substantial salary cut during the coming year when administrative salaries either have remained constant or have been increased. Retrenchments resulting from the decrease in tax revenue of the secondary depression have affected certain urban operating budgets to the extent of from 10 to 15 per cent. Since these current expense budgets have already been heavily pruned as a result of the 1929 depression any additional reductions mean either a shortening of the school year or a severe reduction in teacher salaries. In either case the effect on total income is the same. It seems, however, that the teachers are ready to meet these emergencies just as they did some years back. But they object to administrative lack of participation in these reductions.

The average teacher, hired under an annual increment step-up salary schedule, sees little difference between this condition and the administrator hired on a three year contract with an increased salary for each year. He feels that the conditions are analogous and that administration should bear the same proportion of decrease as the teacher.

Spot-survey of certain areas indicates that the practice of administrative increase and teacher decrease was the exception rather than the rule. In most instances the administrative salary remained constant when a teacher cut was made. In a few cases the superintendent insisted upon receiving the same proportional cut as the teachers.

While the increase of administrative salary, although the classroom teacher suffers a cut, may be defended legally there appears to be little defense from the standpoint of professional ethics. Nothing is so disturbing to teacher morale as a two-way policy in financial rewards. The emotion created tends to widen the already undesirable gap between administration and teaching. There is no moral justification for creating a two-way salary policy. Teacher and superintendent are in the same boat, differing only with respect to aspects of service rendered. A single salary policy is the most defensible and, in the long run, safest procedure.

New Rochelle Reports

NEW ROCHELLE, N. Y., is celebrating its 250th anniversary of settlement by a courageous band of French Huguenots. As its share in the process of interpreting community progress, the public schools have produced an unusual report that covers the public schools from the earliest days to the present. While sketchy attention has been given to the earlier efforts, major emphasis is placed on the current range of educational activity. The report has been carefully written from the human rather than the statistical standpoint. In illustration, type and paper it is a most worthy public school production. Even more significant is the fact that it represents a group rather than an individual effort. Many teachers and administrators gathered and wrote the information, assisted in obtaining pictures and, finally, cooperated in editing the completed work.

The Editor

Evaluation of all round growth replaces the usual exhibition of skillful accomplishments at this high school. Student committees select and arrange art work to show the development of each pupil over a period of time. They note the broadening scope of interests and the work done for others, whether in school magazines and plays or for the community. Some of the ways in which they think of growth sensitiveness, maturity, social relationships and power of organization are shown. Pupils may work individually or in groups at undertakings vital to each.

A School Art

SIBYL BROWNE

THE objective of most curriculums today, even for the arts, is a continuous integrative effect upon the pupil as an individual and as a member of his social group. Comments of parents, teachers and administrators often would indicate, however, that the chief goal of art activity in our schools should be artistic competence. Many adults wistfully survey simple fields in which they should like to practice one of the arts were they competent to do so. Some feel that it is lack of training, not of native resources, that causes them to stand untouched by the works of art that delight their friends. Criticism of the appearance of homes, towns and cities is blandly laid upon the doorstep of the school.

Such regrets over misspent youth are persistent enough to have left their traces in piecemeal fashion upon many older and newer art curriculums; one isolated exercise has been anxiously tucked in here; another item pieced on there. The whole may finally present a patchwork of unrelated skills and theories to be learned by children at the tenderest ages possible and with too little regard for the learners themselves as living creatures with developing

That Functions

The neighborhood furnishes dramatic material that calls for interpretation in art.

powers, needs and tastes of their own.

An antagonism exists between goals in terms of integration and these short-sighted drives for filling up gaps. The latter resort chiefly to three kinds of measures, each unwholesome: insistence upon technic as a *summum bonum,* placement of activities at unsuitable age levels and introduction of minutiae of theory to be given in small unit dosage.

To the already crowded bill of fare for the school day are often added recitals of color theory and exercises that illustrate art principles or perspective; both are rendered indigestible by their lack of connection with life. These confuse and harass pupils to a greater or less degree and set up tensions that hinder integration.

Painting scenery (top) calls for selection and for work in democratic fashion for a result important to the group. Below: Pupils construct an outdoor theater.

When skills and knowledges are acquired, as is sometimes the case with musical prodigies, at the expense of all-round youthful development so that the adult virtuoso is emotionally an adolescent, the accomplishments, although giving pleasure to others, turn out a misfortune to their possessor.

Who has not somewhere witnessed the 7 or 8 year old cramped over his little paper scrubbed by the eraser as he toils to achieve a figure drawing in the proportions suitable for an academic art school? Not only do exercises of this kind exploit muscular coordinations of which the child is capable only with great strain and anxiety but they make a love of drawing or growth in confidence practically impossible. Such an experience is unprofitable since it does not lead on propitiously to future experiences.

Even though curriculum makers should turn their backs upon the broadly miseducative effects of pro-

cedures like those noted and be content to develop skills at any price, it is doubtful whether direct instruction in technic will bring the facility wished.

The strain felt by pupils urged to dexterity *per se* blocks the very powers that would enable them to control tools and mediums. When, just the contrary, boys and girls are absorbed in ideas to be expressed, when they understand that others value straightforward effort, they work fearlessly and they normally handle materials in lively and masterly fashion. In fact, their technics, being those felt necessary for particular pieces of work, have a quality not to be found in mechanical facility learned out of connection with present need and use.

Artistic competence is not a bag of juggler's tricks. It is possessed by the person who through clay, paint, wood, metal or any other material habitually reacts to life about him in saying something that has to do with living and that can be understood, used, enjoyed or loved by others. The competent person must have technical ability but in far wider terms than many now admit, for to employ the artist's materials adequately is to manage them so that content, form, color and medium are mated pleasingly and functionally. Skills cannot wholesomely be cut off from the purposing of living beings.

Is there a fundamental disagreement between a wish for such competence and personality building as a goal? Obviously not. In fact, without the power of expressing what one feels, integration is blocked; tensions are left unresolved. Continuous articulation of personality depends upon an easy interplay with the environment, upon sensing, responding adequately and being upbuilt again and again. Too long has the layman's contact with others been limited to verbal communication. If a broad conception of artistic competence could influence curriculum revision, richer development would be promised to youth.

It is normal for human beings to express themselves in plastic and graphic as well as verbal terms. The expression has some measure of validity whenever it is not forced but is a natural and integral part of the full living of any given time. The curriculum that sets the stage for suitable enriched participation experienced joyously under the guidance of a sensitive teacher (and this axiomatically calls for much creative activity) has gone far in providing for art that will function permanently.

"One learns," says Professor Kilpatrick, "what one accepts to act upon and with the conditions, reservations and limitations under which he accepts it."

What we need is habitual cumulative reaction in creative terms to a maximal number of situations in a broadening environment. When the teacher guides each child to his most wholesome achievement and helps him to incorporate the newly gained understandings into large concepts, true artistic competence becomes stranded into the satisfying living that produces tough-fibered, yet sensitive and socially alert personalities. Organized meanings and insights constantly accumulate through such

Pupils become better integrated when, like this boy making an ash tray, they develop designs in terms of medium and use.

living; these form curriculum goals. Any helpful guidance for teachers must clarify creativeness as being far from an eccentric notionate process but, oppositely, normal, original and dynamic interaction with surrounding life. Since the integrative effect of creative activities depends upon interrelationships (between experience and experience, activity and pupil, pupil and environment, and all of these in past, present and future), a course of study should include whatever our understandings of child maturation indicate for the functioning of the curriculum.

We know, for instance, in the first place, that the physical development of a pupil at any given time makes activities with some materials unprofitable, with others congenial and in the long run advantageous. Exercises for which the child is unready or physically unequipped disturb his growing integration; some mediums bring general strains.

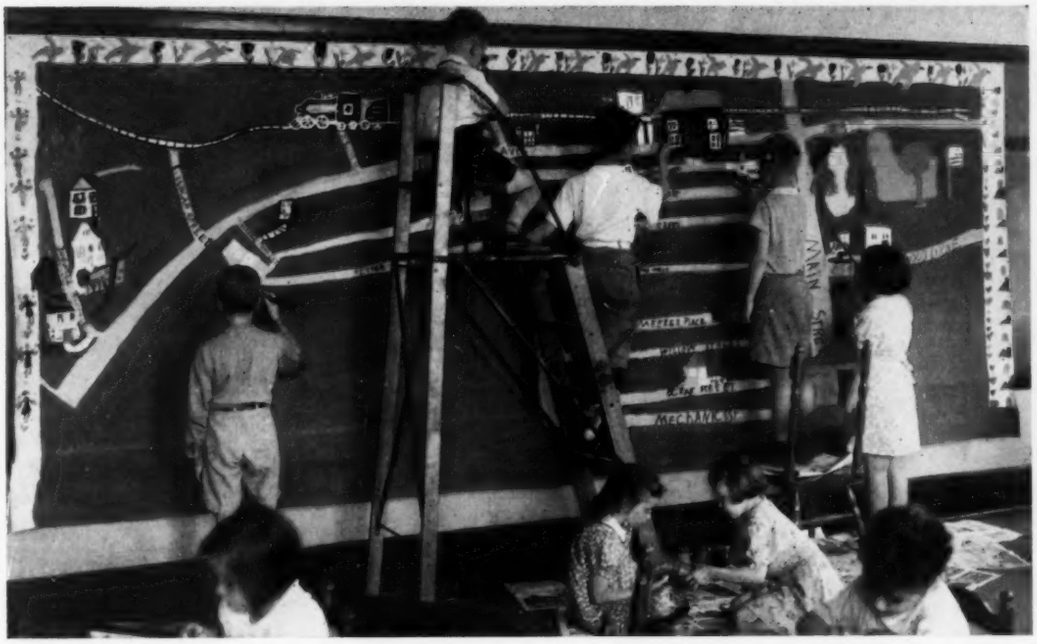
Although we provide materials of greater variety than ever before, their use is determined in relation to muscular coordination and continued growth over a period of years.

We know, in the second place, that socialization of personality is gradually won. Teachers should then provide for that balance of group and individual undertakings needed by any group. Besides this, the content of self-expressive or communicative art, drawn from various fields, will be treated in its bearing upon present living.

No matter whether interest lies in Pueblo Indians, the Middle Ages or architecture, emphasis upon its connection with the here and now makes art activity genuine and meaningful. Time is wisely spent in helping each child choose subject matter vital to him; thus exit the mass-produced turkeys of Thanksgiving, rabbits of Easter and still life all the year round. Broadening understandings, sympathies and allegiances are given a chance for expression.

Art teaching is properly influenced by the fact that with the coming of adolescence boys and girls find in dealing with social questions of the day, even controversial issues, a way of maintaining a sense of adequacy and a means of articulating themselves with their world.

In the third place, to take advantage of what is known about general shifts in pupil readiness, the curriculum should suggest ways of determining the auspicious time for encouraging various kinds of activity —self-expression, dramatic play, communication and planning or design-



Map making becomes joyous and real to these second grade pupils. After planting gardens at school and at home, the children visited each home garden and decided to paint a picture map to show where the gardens were. As questions arose about design and color, pupils collaborated in making necessary decisions.

ing within the limitations set by life.

The young child expresses himself unaffectedly, often in dramatic play, and cares little what anyone else thinks of his work. Only later does he feel a need for art as communication.

Not until adolescence is the zest for dramatic play supplemented, although not at all supplanted, by wishes for an adult approach to life. Those adults who gallantly hope that the fruit of school art will be apparent in lovelier homes, villages, cities and countrysides will lose rather than gain if they insist that children work mechanically or too early at adult problems except in realistic free play.

The understanding that youngsters gain through art will be gotten wholesomely in relation to trips about the neighborhood from building life-sized playhouses and stores with gay decorations, laying out better planned communities, planting gardens and helping to arrange the schoolroom or parts of the home, particularly for festive events.

Since costume design introduces certain obediences to convention, alert teachers almost always steer younger pupils away from those phases that would bring too much clothes consciousness; they substitute the making of articles like simple painting aprons or costumes for plays in which materials can be handled imaginatively. Adolescence provides natural incentives for designing in terms of personal dress, house furnishings and community planning.

In the fourth place, we are aware of the fact that critical attitudes usually emerge with the approach of adolescence and should be turned to constructive account. Although a young child will during the most fleeting interest spans, if at all, admire or criticize even simple works of art, boys and girls from pre-adolescence onward increasingly wish to evaluate their art and to work from the conclusions reached.

During early years children will often progress in spite of the teacher's ignorance or *laissez faire* policy but either of these is dangerous after pupils reach 10 or thereabouts. For it is a chief duty of a teacher to encourage those undertakings that will best knit together present and past experience to illuminate with insight the next step forward.

Every curriculum worker will encounter other problems, some of them at first glance formidable. However, no matter what the physical limitations, wherever democracy is in the saddle, matters will go well with developing boys and girls.

Planning will be done jointly. The problem is too complex to be handled with less than the contributions of all. Those who know most about psychology and the philosophy of education will indicate general directions along which they think profitable art teaching would move. They will always be ready to help evaluate practices. Those who best understand children's natural ways of working as a part of their maturation and those who are most sensitive to art quality and the social import of art will introduce other strands into the fabric which all three groups will weave together.

Made of fibers tentatively tested in discussion and practice, the curriculum fabric will not be too closely or minutely woven; it will leave room for those strands that must be added by other teachers. All concerned will provide for pupil participation in the planning.

"What do you think the group should do next?" "What have we learned from this undertaking?" "How could we carry on the enterprise better another time?" are typical of the questions that will introduce boys and girls into the planning group.

Democracy implies more than sharing; it becomes sentimental without a common will to achieve the most intelligent lines of action. Based upon sound thinking the curriculum will deal with physical coordinations, needs, drives and sensitivities in their relation to personality building and will consider the whole in cumulative and progressive, not static terms. For such is the texture of life and education's task is to enrich living.

How Teachers' Associations View Public School

APPROXIMATELY three-fourths[1] of the nation's million teachers are members of state teachers' associations; consequently, the teaching profession and the public look to these organizations for educational leadership.

This article is the first of a series based upon replies from forty-three[2] state associations. It offers an overview of the plans of these organizations for streamlining public school finance. Only local and state sources of revenue are considered.

The teaching profession (more so than the public) is aware that the tremendous increase in government expenditures has adversely affected public school finance. The costs of welfare, old age pensions and "experimental services" have made great inroads into both customary and potential revenues for public education. In a recent survey, most of the states reported that their total expenditures for public education today are considerably below the 1930 level.

It is only natural, then, that the biggest plank in the platform of many state teachers' associations is: To obtain adequate, dependable and continuous revenues for public education.

The descriptions of the major problems present various phases of a definite trend toward more state aid. The sequence is something like this:

Real property was overburdened with taxation. Public schools, dependent mainly upon the property tax, suffered greatly from the various effects of the depression. Much attention was focused upon the inequalities in the ability of communities to support public education. In some states, leadership anticipated the need for property tax relief and supplementation of the school fund with revenues from other sources. In other states, relief was compelled by tax limitations, often too severe and frequently imbedded in the state constitution rather than adopted as flexible legislation. The great decrease in revenues from the local property tax and the resulting drastic curtailment of the public school program brought no alternative but to turn to the state for basic support.

The ten major problems of public school financing seem to be:

1. Inequalities in the ability of local units (and states) to finance education.
2. Decrease in revenues from property tax resulting from (a) lowered valuations, (b) delinquent taxes, (c) tax limitations, (d) taxable property reverting to government, (e) homestead exemptions and (f) bargain tax sales.
3. Decrease in revenues from earmarked funds.
4. Prior claims on sources of state revenue.
5. No specific sources of revenue guaranteed to schools in place of the property tax.
6. Constitutional restriction on sources of (or methods for distributing) state revenues for schools.
7. State aid insufficient to replace losses from local revenues.
8. State aid appropriations not paid in full.
9. General expansion of other state governmental services and expenditures.
10. The expanding needs of schools, especially in the junior college, adult education and preschool areas.

States in which the public schools are largely dependent upon the real property tax include Iowa (where more than 98 per cent of school revenues are received from local sources), Colorado, Kansas, Nebraska, Nevada, Vermont, North Dakota, South Dakota, Connecticut, Idaho, Illinois, Maine and Massachusetts.

Lowered valuations have caused large decreases in school revenues. In Kansas, rural district assessments have dropped a third since 1930. During the same period of time, total school expenditures decreased 33 per cent. In North Dakota, the total valuation decreased 64 per cent from 1922 to 1936, while school taxes levied decreased 58 per cent during the same period.

In Ohio, the write-off of assessed valuation cut tax-raising power more than 30 per cent during the period from 1931 to 1936. In Utah, the assessed valuation of the state shrank 26 per cent between 1930 and 1938, with a resultant loss to schools of $500 per schoolroom. In Missouri, property valuations dropped 22 per cent from 1931 to 1936 but have been increasing lately. Nebraska, which is almost entirely dependent upon the local property tax, spent 26.3 per cent less for school expenditures in 1936-37 than in 1929-30. In Montana, the state valuation dropped 28 per cent.

While several states report delinquent payment of taxes as a major problem, the delinquent tax situation is improving steadily. The outstanding exception is the situation in Illinois, where delinquent taxes in Cook County (Chicago) for the period of 1929 to 1935, inclusive, exceed $461,000,000. Of this amount, $150,000,000 are delinquent school taxes of Chicago and other districts in Cook County. As a consequence, total school expenditures in Illinois decreased 31 per cent from 1930 to 1937. Unpaid scrip is still out and more than 11,000 teachers are paid less than $800 a year.

Tax limitations have handcuffed school progress in several states. Alabama and Ohio have 10 mill tax limitations.[3] In Kansas, the limitation for school operating expenses is 14 mills for districts with high schools and 6 mills for elementary

[1] In 1935, the total number of members of state associations was 723,601, or 80 per cent of the teachers employed. Arthur L. Marsh: The Organized Teachers. 1936.

[2] States not included in this report are: Delaware, Maryland, New Hampshire, Oregon, Rhode Island.

[3] No data from Indiana.

Finance

ARTHUR H. RICE

schools. As is the case in most states having tax limitations, the limits in Kansas can be raised by local action.

Mississippi, Oklahoma and Michigan have 15 mill limitations, although in Michigan the fact that the cities, except in a few instances, may levy in excess of the limitation actually permits higher school district levies. In New Mexico, a constitutional provision limits taxes to 20 mills, with 5 mills being allocated to schools. In North Dakota, the school levy is limited to 18 mills on 50 per cent of true valuation.

In Washington, a limitation initiative law restricts school taxes on a 50 per cent assessment valuation to 10 mills for the school district and 10 mills for the county. West Virginia has a classified property tax amendment that fixes maximum levies on all classes. Wyoming has a school district tax limit of 8½ mills, plus 2 mills for high schools.

In South Dakota, considerable taxable property is reverting to the government. Florida is protesting against bargain tax sales which "encourage people to neglect taxes and penalize those who pay promptly."

Homestead tax exemptions are operative in a few states and are threatened in others. In Oklahoma, the exemption of $1000 on each homestead took away from local school revenues about $1,700,000 (which was replaced by state appropriations). In Georgia, a $2000 homestead exemption bill affects country towns and outlying country systems to a great extent.

Utah reports the homestead exemption as an acute threat. The proposed exemption would be up to $2000 on homesteads and up to $300 on personal property. Colorado and Nebraska are among the states that have defeated movements to secure homestead exemptions.

During the last seven years there has been a wave of direct legislation by the voters, accomplished through constitutional amendments or initiated acts. The early part of this movement resulted in a number of unfortunate restrictions, the most flagrant example of which is the unreasonable limitation on real property. Of late, however, educational forces have been "fighting fire with fire"; they have been obliged to resort to constitutional amendments or the earmarking of funds in order to protect the public schools.

The following six trends in "legislating by amendment" are indicated in the reports from the various associations:

1. Several states are facing tax limitations or homestead exemption amendments.
2. Old age pensions are seeking prior claims on state revenues.
3. There is evidence of nationwide pressure to earmark gasoline and automobile taxes for highway purposes.
4. Several states are seeking to remove constitutional obstacles to state aid and equalization plans.
5. A few states are considering an amendment to establish a graduated income tax.
6. Some states are seeking to guarantee or to increase state aid through constitutional amendments, frequently by the earmarking of funds.

Whether funds for schools should be earmarked, either by legislation or by constitutional amendment, is a debated question of policy. In New York, the constitutional convention rejected earmarking as a state fiscal policy. Louisiana, on the other hand, is concentrating its efforts to replace in the constitution an amendment that previously gave the schools the revenues from the severance tax.

In Colorado, approximately 75 per cent of all state funds are earmarked, with 85 per cent of sales and liquor taxes allocated to old age pensions and all motor fuel tax going to roads. Through the efforts of the Colorado Education Association, working in cooperation with other friendly groups, an income tax was adopted, with revenue therefrom specifically designated as a partial replacement for property tax. Arkansas is opposing an initiated act that would take 40 per cent of sales tax for old age pensions and would put the other 60 per cent in general revenues. Alabama and Michigan are opposing amendments that prohibit the use of receipts from gasoline taxes except for highways. Several states have defeated this movement.

In Ohio, the evidence seems to be that an initiative petition to submit a constitutional amendment prohibiting the levying of any excise tax on sales, except the tax on the sale of gasoline, has been defeated.

In Kentucky, an equalization program is blocked by the constitutional requirement that all state aid be distributed on a per capita basis.

A proposed constitutional amendment permitting the levying of a personal income tax is endorsed by the Tennessee Education Association. Illinois favors amendments permitting classified income taxes. In Pennsylvania, a graduated income tax amendment was defeated in November 1937 and cannot come up again for consideration for five years.

The Utah Education Association is directly sponsoring two constitutional amendments that would remove constitutional restrictions on state aid, create new state funds and allocate to the funds several sources of revenues. Utah perhaps is encouraged by the success of the California plan where the constitution of the state now stipulates that from the first monies coming into the state treasury there shall be paid to each school district $60 per a.d.a. in the elementary schools (allocated partly

First article of a series on the attitudes of state associations on timely questions

on an equalization basis) and $90 per a.d.a. in high schools and junior colleges. West Virginia is proposing a constitutional amendment that would make the state's payment of $50 per a.d.a. a prior obligation on all state revenues.

There is a wide variance in the proportion of public school expenses paid from state funds. The range (from answers received) is from 2.2 per cent in Iowa to 89 per cent for North Carolina. Colorado, Connecticut, Kansas, Idaho and Nebraska report receiving less than 10 per cent of their school revenues from state funds. Second highest is New Mexico, with approximately 70 per cent in 1937-38. Louisiana, Florida and California indicate that approximately 60 per cent of their school revenues come from the state treasury.

Other states reporting more than 50 per cent state aid include Washington, West Virginia, Oklahoma, Ohio and Texas. States in the from 40 per cent to 50 per cent state aid bracket include Alabama, Georgia, Mississippi, South Carolina, Tennessee and Utah; in the from 30 per cent to 40 per cent bracket, New York, Kentucky, Arkansas, New Jersey and Michigan. Most of these percentages are only approximately correct, since there seems to be considerable variance in the bases on which they were computed.

Arguments Used for State Aid

In those states that are seeking to get a foothold for state support, the arguments are based primarily on the need for reducing the tax burden on real property and for equalizing gross inequalities in educational opportunities. If state aid is fairly well established, the appeals for larger appropriations usually are made on the basis of the state's inherent responsibility for a basic minimum school program.

The progress of state aid, however, is shadowed by a corresponding decrease in local support for schools and possibly a decrease of local interest in schools. This situation is attested by North Carolina, where the state has assumed almost full financial responsibility for the basic minimum program and where today the most urgent need seems to be for the development of local interest and local support to supplement or improve the state minimum program.

The direct payment of teachers' salaries by the state, such as in North Carolina and Georgia, raises the question as to whether the teacher's economic independence of his local district may have an adverse effect upon his interests and attitudes toward the community. This suggests those inevitable questions: Is the state's assumption of greater financial responsibility also going to mean greater control of education by state agencies? What is the community's constant responsibility for the support of its educational institutions?

This analysis of the major problems in the various states indicates the programs for improvement.

Six Principal Objectives

Summarized, the principal objectives of the state education associations for the financing of public education from local and state revenues in 1938-39 include the following:

1. Opposing movements to limit taxation for schools.
2. Trying to protect present revenues from other encroachments.
3. Seeking new sources of revenue to aid schools directly or indirectly.
4. Campaigning for additional state aid: (a) to relieve the property tax, (b) to replace lost revenues, (c) to provide for greater equalization of school costs and (d) to guarantee a minimum basic program.
5. Seeking a guarantee that the schools will receive the full extent of monies appropriated to them by the state.
6. Encouraging local units to supplement the state minimum program.

The old corn game of appropriating "mythical" funds for schools still serves political purposes. Two M.E.A.'s—Michigan and Minnesota—are among the states suffering from promised funds that only partially materialized. Washington also is short about 10 per cent of its appropriated state aid. In Michigan, the legislature passed the buck to the governor, who was given blanket authority to allocate funds as he sees fit to the limit of the appropriations. Some funds were cut more than others, with the school state aid fund being trimmed 10 per cent in 1937-38 and a more serious lopping threatened in 1938-39.

The advent of state aid as the major factor in public school support is fraught with political dangers. State funds for schools are on the verge of becoming partisan political issues. It may be that a constitutional amendment to guarantee reliable and adequate school support, such as adopted in California, is the inevitable solution. Arthur L. Marsh, secretary of the Washington Education Association, writes:

"As long as all state support and subsidies must be appropriated by each succeeding legislature from revenues contributing also to other functions of governmental service, the school forces in this competitive situation have no choice but to make the most effective possible use of political action to obtain the school appropriations and allocations of revenue. However undesirable, it is necessary that the school lobby be one of the strongest lobbies at the capital in every session of the legislature.

"Since school needs are comparatively stable and since school adjustments to fluctuating resources cannot be made easily, it is greatly to be desired that financial provision for the schools be made constitutional. With such establishment the energies of the school forces could be very profitably expended in obtaining larger and better returns for the public's investment in school service."

A similar point of view is expressed by Earl H. Babcock, president of the Michigan Education Association, in the following words:

"The public schools should be operated without having to resort to any partisan political pressure. This can be accomplished only when the source of income is made definite and not subject to manipulation by those seeking partisan ends. It may be necessary to remedy this situation and to prevent the possibilities of the political implications by writing into the state constitution definite provisions as to the amounts which shall be appropriated to schools, leaving to the legislature the question of specifying how the money shall be distributed."

Nonpublic School Support

L. W. KINDRED

IN RECENT years considerable attention has been awakened in the problem of using public money in aid of elementary and secondary private and parochial schools and in issues concerned with religious influence in public educational institutions.

This problem is not new to American education. It occupied a dominant position in the struggle between private interests and exponents of free public schools during the second and third quarters of the nineteenth century. Except for a brief period in the nineties, the movement for divided school support remained more or less dormant until revived in the years immediately following the World War. From that time to the present, it has undergone a steady growth with noticeable acceleration during the present decade with the result that it has now become a national problem demanding national recognition.

In order to understand the issues involved in this problem and to ascertain the legal status of questions raised by it, a study was made of the legal aspects of policies and practices with respect to the public support of elementary and secondary private and parochial schools. The findings are based upon an examination of existing constitutional and statutory provisions as well as upon a detailed analysis of court cases and decisions. The results thus obtained represent a comprehensive statement of the law with respect to the use of public funds for private and parochial schools.

The summary is divided into three parts: The first part enumerates constitutional restrictions upon the use of public funds for nonpublic institutions; the second part includes legal principles laid down by the courts and statutes that pertain to indirect forms of aid; the third part treats of legal rulings and statutes involving direct forms of aid to such schools.

Clauses exist in the constitutions of 45 states expressly prohibiting the use of public money for private and parochial schools, while the constitutions of three states—Maine, Vermont and Maryland—do not have such provisions.

The number and kinds of clauses imposing these restrictions are as follows: 17 states do not permit the use of public funds for any purpose other than the support of common schools; 8 states forbid the appropriation of public money, property or credit to educational institutions not under the exclusive control of the state; 22 states prohibit the use of public funds for any sectarian purpose, society or institution; 11 states prohibit aid to educational institutions controlled by a sectarian group; 14 states do not permit grants-in-aid of sectarian schools; 4 states have clauses preventing the appropriation of public funds for the benefit of private nonsectarian schools; 6 states have provisions withholding public money from any school in which a sectarian doctrine is taught, and 11 states have a number of miscellaneous provisions concerning the state's acceptance of trusts for sectarian purposes, control of educational funds, assumption by the state of liabilities of private and parochial corporations and grants of public money to persons, associations and corporations.

Constitutional clauses concerned with the protection of religious liberties frequently enter into the consideration of questions involving the use of public funds. Most of these clauses are found in the bill of rights of the several state constitutions. They guarantee the right of each individual to follow the dictates of his own conscience by prohibiting the enactment of any law respecting the establishment of religion or the giving of preference to any religious society or mode of worship, thereby assuring to all religious sects and denominations equal privilege before the law.

Moreover, under these constitutional guarantees of religious liberty, no one can be compelled to erect or support a place of worship and religious services cannot be held in public educational institutions. Although these clauses do not have an obvious bearing upon education, nevertheless they play a prominent part in litigation related to the problem of divided school support.

Under both constitutional and statutory provisions, a number of cases have come before the highest state courts in which the question raised has been that of leasing private property for public school purposes. The courts have held, in answer to this question, that school directors may, in the exercise of their discretion, lease private property for public school purposes when the public school building is inadequate, out of repair or such that the best interests of the district can be served by leasing private property.

If the school directors exceed their statutory authority, however, their action can be set aside by the courts. This does not mean that a board of education will be enjoined from conducting a public school in the basement of a church where it can be shown that public money was not used to aid a sectarian denomination.

A study of the legal aspects of public support of private and parochial schools will be summarized in a series of three articles by Doctor Kindred, the director of the Marsh Foundation, Van Wert, Ohio

It does mean, however, that public schools cannot be conducted in buildings, owned by sectarian associations, wherein religious instruction is given and where public funds are paid as rent to associations.

In a majority of early cases considering the question of using school property for other than public school purposes, the courts took the position that the school directors and electors were without authority to permit the use of school property for religious and other meetings as such use was a violation of the corporate trust and an unwarranted use of funds raised by taxation for the support of schools. Most of these early decisions have been superseded by statutes so that today laws exist in 33 states authorizing the use of school property for a number of purposes.

Under these statutes it has been held that the directors may grant the use of school buildings and equipment for the purpose of a private tuition school in view of the privileges such school brings to the children of the community; that school property may be used for religious and other meetings since the use is but temporary and occasional and may be denied by the electors at any time; that such use must be at times when the building is "unoccupied for common school purposes," or during the interval between the close of the spring term and the beginning of the next term; that school directors have no authority to interfere with religious and other meetings which have been approved by the qualified electors of the district, except on statutory grounds for failure of the users to leave the building in good condition and repair, and that the temporary use of school buildings for religious meetings and Sunday schools does not violate a constitutional provision prohibiting compulsory support.

Statutes were found in Illinois, Indiana, Louisiana, Maryland, Massachusetts, New York and Kansas providing free transportation for children attending private and parochial schools. In Connecticut, New Hampshire and Vermont, this service is provided for children attending public and private nonsectarian schools. In other states, such as Oklahoma, West Virginia and Wisconsin, the language of the statutes is ambiguous and uncertain regarding transportation provisions.

In decisions related to the question of free transportation for all school children, it has been held that a school district cannot, without express statutory authority, contract for the conveyance of both public and parochial school pupils, while under a statute definitely appropriating public funds for the transportation of pupils to free schools supported by a church or religious society, it was held that the statute was contrary to that section of the constitution which prohibited the giving of aid to sectarian schools.

Statutes exist in Louisiana, New Mexico and Indiana providing free textbooks for children not in attendance at public schools. In Louisiana, the law provides free supplies as well as textbooks. The New Mexico statute restricts free textbooks to elementary school pupils from grades 1 through 8. In Indiana, a petition signed by 51 per cent of the qualified electors in any district is required for the establishment of a school library containing elementary textbooks for all the pupils in the district from grades 1 through 8.

Cases involving free textbooks and supplies for all school children have been tried in two states. In New York, it was held that free textbooks and supplies cannot be provided for parochial school children and that furnishing these items at public expense constitutes the giving of aid to the institutions which the children attend and such aid is contrary to the constitutional prohibition against the use of public funds for sectarian educational institutions.

In contrast to this decision, the Louisiana supreme court ruled that the appropriation of public funds for the purchase of textbooks and supplies for all school children of the state was constitutional on the grounds that the books and supplies were used by the pupils, not the school they attended; that the purchase of religious books was not included within the appropriations, and that the loan of the books to the pupils brought this practice within the police power of the state and served to promote the welfare.

The findings that have been related thus far reveal the nature and kinds of constitutional restrictions upon the use of public money for nonpublic schools. They also show certain types of questions that have come before the courts involving indirect forms of aid to private and parochial schools and the position that courts have taken on the issues raised. In the article to follow, additional court decisions and statutes will be discussed embracing other forms of indirect aid to private and parochial schools as well as issues concerning religious influence in public educational institutions.

High school pupils express their enthusiasm for Youth Hosteling in a radio interview in Chicago. The group is about to start on a tour of the hostels in Wisconsin and the Great Lakes area over the Labor Day week-end.

Half Time, Half Pay

for Married Women Teachers

JOHN B. GEISEL

AT THE beginning of the depression criticism was leveled against the employment of married women teachers, especially when their husbands were working. The following reasons, variously expressed, were advanced: (1) as there are not enough jobs to go around, it is unfair for one family to have two wage earners while another family has none; (2) the woman's place is in the home, to take care of the home socially and to take care of the children, and (3) the married teacher often sacrifices certain school duties for home duties; she cannot devote herself unreservedly to teaching as her one main task.

Not one of these arguments, it seems to me, can be gainsaid, even though we admit that the general effect in many cases has been to penalize marriage and has resulted in secrecy, subterfuge, deceit, postponement and cancellation of marriage. Nevertheless, each argument might conceivably be weighty enough to account for the regulation against hiring married teachers. It is not these arguments but rather the problem itself of employing married women teachers that can bear further examination.

How often have we not heard one superintendent say to another: "She was my best teacher, but she got married and I couldn't keep her; we have a ruling against married teachers."

Administrators are agreed that such a blanket ruling has cost education a great price in the form of quality teaching personnel. Speaking generally, we are forced to agree that the major competition in a young woman's life is getting a husband. Speaking generally again, we are forced to agree that those young women who meet this competition are more normal than those who do not. When we consider that the average duration of women in teaching positions is around five years, it becomes evident that most of our women teachers actually do meet the fundamental competition of their lives, marry and leave the teaching profession. As a class, those who leave the profession because they marry are perhaps better rounded personalities than those who remain.

Married teachers have more poise. They show less anxiety, less nervousness, less mental unbalance. Those who have children often show a maternal attitude toward pupils because their experiences at home prepare them for this. They are socially more mature and more generally interested in other people, because marriage as an experience is extrovert rather than introvert.

To avoid losing the better qualified women teachers through marriage, the principal of Alpena Central High School, Alpena, Mich., would effect a compromise whereby married women would be retained

Granting some truth to the statement that teachers lost through marriage are the better qualified teachers, what is to be done about it? I suggest the plan of retaining teachers on a half-time basis. This plan, besides removing the vicious penalty on marriage, has several advantages.

Two half-time teachers are able to carry at least as much work if not more than one full-time teacher. At schools in which the average teaching load of a full-time teacher is five classes and one extracurricular activity, it would not be regarded unjust to give a half-time teacher either three classes or two classes and an extracurricular activity involving daily attention.

Experience in some places has shown that a half-time married teacher carries more than a half load successfully and with pleasure. While she realizes that she contributes a little more than half a regular teaching load, she much prefers this to losing her position entirely, and she is only too glad to carry a load that cannot arouse the envy of teachers and citizens who would criticize if the odds were in her favor.

During the first few years of married life it is convenient for young couples to save a little money and establish security. Teachers as a class are not moneyed, and marrying successfully does not necessarily mean financial independence from that time forth. The husband himself is still in the beginning of his life work and has by no means achieved his full earning power. It might conceivably be much better for the success and growth of the marital relationship if the wife could continue at a part-time capacity in her profession. This would give her an opportunity not only to share the financial burden of married life but also to contribute to the growth of the family security. This division of her energies also is essentially extrovertive and provides an opportunity for healthful distraction from selfish personal interests so keenly centered on the home during the first part of married life.

As the satisfactions that go with good teaching are many and enduring, so the transition from full-time teaching to full-time homemaking is difficult. The change is too quick and too complete. Our best teachers feel it most keenly. Teaching pleasures are suddenly substituted with other pleasures—a substitution that involves, in most instances, a shifting from a wider circle of influence in school to a smaller circle in the

(*Continued on page* 30)

Noon hour athletic activities for boys have been built around basketball, soccer, softball and tennis. Wrestling, under faculty supervision, is on the program each Monday and Wednesday.

Noon Hour

EVERY public school pupil is entitled to the advantages and development that accrue from a well-planned and well-executed physical education program. In the school system of Tunkhannock, Pa., having an enrollment of 600 pupils, we have provided two hours of physical education each week for each pupil, taught by certified men and women teachers.

Usually 50 per cent of the junior-senior high school pupils come from districts outside the borough. Because of their distance from home, they are required to spend the full day at the school. For that reason we are faced with the problem of providing activity during the noon period. This we have done by establishing an intramural athletic program and a well-equipped game room.

Each Monday and Wednesday the boys, under proper supervision, have the use of the gymnasium and the girls, the use of the game room. On Tuesdays and Thursdays the privilege is reversed. On Friday noon both the boys and girls spend the noon period in dancing class.

The game room has been provided with such equipment as ping-pong tables, quoits, checkers, dominoes, cards, bingo, a bowling game, a table game known as "Kikit" and several variations of football, baseball and a number of games similar to parcheesi.

The athletic program during the noon period has been built around softball, touch football, soccer, volleyball, basketball and deck tennis.

Since provision has been made for activity of nonresident pupils there has been a marked increase in school interest and the mortality rate has definitely decreased. The following statistics substantiate this statement:

As the greatest dropping out came between the ninth and tenth grades, the percentage of "dropouts" from the ninth to the tenth grades has been as follows: 1931-32, 13 per cent; 1932-33, 31 per cent; 1933-34, 30 per cent; 1934-35, 32 per cent; 1935-36, no dropouts.

This plan was started in the fall of 1935 and although the improvement in pupil interest may be attributed to things other than this organized activity we believe that it contributed to the maintenance of interest.

As a culmination of the organized activities of the fall and winter we devoted some time to recognizing the achievement that has been made by these otherwise underprivileged nonresidents, who, because of their inability to remain after school hours, have been deprived of the opportunities afforded borough pupils.

The borough pupils were divided into groups on the basis of the wards in which they resided. Since there are four wards in the borough, we named these competitive groups ward 1, ward 2, ward 3 and ward 4. The pupils outside the borough were divided into two groups, ward X and ward Y. The constituency of each ward met and elected an executive committee of three pupils. Then a meeting was held of all executive committees, two physical education teachers and the supervising principal. The elementary regulations were formulated and a number of points for events was decided upon. No contestant was permitted to enter more than four events so that a maximum number of pupils could participate. Approximately one and one-half days were necessary to complete the program. The committees

Volleyball, basketball and dodge ball games are scheduled for the girls on Tuesdays and Thursdays. Both boys and girls may spend the Friday noon period in dancing to tunes played by the school band.

Games

FRANK T. DOLBEAR

How a noon hour physical education program was inaugurated in the Tunkhannock Borough public schools in Pennsylvania for the benefit of out-of-town pupils is described here by the supervising principal

assisted in scheduling the program, selecting the judges and referees and in deciding on matters pertinent to each contest.

Since each class had an opportunity to present an assembly program, it was decided to include dramatics and other phases of school activities that were not related to the noon program.

Following is a list of the contests held and the number of points awarded to the first three teams: dramatic contest, 20, 15, 10; girls' foul shooting contest, 15, 10, 5; boys' foul shooting contest, 15, 10, 5; music contest, 20, 15, 10; girls' basketball, 20, 15, 10; spelling match (each grade chose three representatives), 20, 15, 10; boys' volleyball, 20, 15, 10; boys' basketball, 20, 15, 10, and girls' volleyball, 20, 15, 10.

Each of the minor activities, ping-pong, quoits, "Kikit," bowling, dominoes, checkers and ring toss, counted 10, 7 and 5 points for the first three teams.

An evaluation of the foregoing program includes the following factors: (1) definite improvement in school spirit; (2) increased participation (practically every pupil participated in one form of a contest); (3) better sportsmanship; (4) fewer injuries; (5) greater evidence of play for the enjoyment of the game than for winning; (6) better coordination; (7) increased emotional stability; (8) the setting up of a definite goal for intramural activity, and (9) development of a greater interest in the athletic program.

A plaque was made in the shop and an unveiling ceremony was conducted at the annual commencement exercises. The plaque is placed in the main hallway and allows for inscription of the winning ward for six consecutive years.

During the first week of June of each year the same type of program is held, except that competition is in outdoor activities. This is the second year for the outdoor competition and results are gratifying.

To keep the parents interested and informed a Physical Education Night was held during the school year at which the following program was presented:

1. Volleyball (Boys)
2. Class Demonstration (Girls)
3. Parallel Bars and Springboard (Boys)
4. Dance (Ninth Grade Girls)
5. Tumbling (Boys)
6. Basketball Game (Girls)
7. Wrestling (Boys)
8. Dance (Tenth Grade Girls)
9. Basketball (Boys)
10. Volleyball (Girls)
11. Boxing (Boys)
12. Dance (Eleventh Grade Girls)
13. Dodge Ball (Girls)
14. Deck Tennis
15. Dance (Twelfth Grade Girls)

The exhibition was well attended and the constituency has been well pleased to provide necessary equipment and proper teaching staff.

Flexible Primary School

LEONARD B. WHEAT

THE public schools of Western Springs, Ill., during the last three and one-half years have been pioneering a new type of elementary organization which indicates unusual possibilities for the average school of the future. The plan had its first development and trial at the primary levels. It is now being tried in modified form at the intermediate levels also, but report on its working there must await further trial. The practical advantages of the flexible progress group system in the primary division of the schools seem well enough supported at this time to justify the present account.

The foundations of the present system were laid in the fall of 1934 with what were then the first grade children. In September 1935 the first, second and third grades were abolished as such and became a three year primary school without annual promotions.

In the primary school each child progresses in school learnings at his own rate. His advancement is continuous. There is no such thing as repeating or skipping a grade. No child is called upon to attempt learnings which are beyond his educational foundations or mental maturity. No pupil has to bide his time waiting for slower ones but constantly faces a challenge to work up to capacity. All children enjoy the advantages of group learning situations with others at their level of development, yet no one has to keep the pace of any one group. The teachers have classes which are easier to teach.

That the success of the plan is not dependent upon small classes or large expenditures of money is shown by the fact that school costs in Western Springs are well below the average for the state of Illinois. They are no higher than under the conventional system and may be slightly lower. The general level of pupil achievement appears to be raised somewhat and the children seem happier and more interested.

Whatever virtues have been found in the new organization in its comparatively short life in one residential suburb may not show up when it is tried elsewhere. The venture should meet the test of a control group experiment in a larger and more nearly average school system before it can be stamped as an improvement for schools at large. The following description of the flexible progress group system, as worked out in the Western Springs primary school, may be of interest to those who want to see the schools fit the child rather than the child forced into the groove and routine of a school system.

The organization of the primary school shows three learning levels or pupil groups in each classroom. For a typical school, which has two beginning classrooms of children a year, this would mean six pupil groups per year, or 18 for the three year primary spread. In Western Springs the actual condition shows about one class of children starting school each year in the Franklin School and about one and one-half to two classrooms of beginners each year in the Grand Avenue School.

This works out into three primary classrooms with nine pupil groups in the smaller school and five classrooms with 15 group levels in the larger school. Each teaching group in both schools is at a different level of progress. In a sense, then, each pupil group is at a different grade level. There are nine learning levels in one school and 15 in the other instead of the traditional grouping into three primary grade levels.

A visitor in any room finds what at first appearance is a customary class situation. The teacher has her pupils divided into three teaching groups. She calls them "brownies," "elves," and "fairies" or labels them with other names used in ordinary classrooms. The "brownies" may be more advanced in their learnings than the other two groups; the "elves," next, and the "fairies," the least advanced in that room.

In the schools of Western Springs, Ill., children in the primary grades enjoy the advantages of group learning with others at their level of development, yet no pupil is required to keep the pace of any one group.

After a prolonged observation of the class, a visitor may find that these groups are considerably more homogeneous than are found in the usual classroom. The reason for this is found when he goes into the next room which contains other pupils who entered school at the same time as those in the first room.

In the second room there are three teaching groups also. They, too, may be called "brownies," "elves" and "fairies." They are not, however, at the same levels of learning as the children in the first classroom, even though they entered school at the same time. The lowest group in the second class is about as far advanced beyond the top group in the first room as the latter is beyond the middle group in the first room.

In other words, the two rooms of pupils, which began school at the same time, do not each contain a cross section of a usual school grade. Instead, each has only half the spread of both classes. Each group within a class, in turn, is at its own stage of school progress. There is no attempt to force any group to cover a prescribed amount of work in a school year or any other given time as is customary in the average school.

From group to group and from room to room, the children vary perceptibly in general development and maturity. This difference stairsteps upward, as one might expect, from the group least advanced in learning among the first year pupils to the group furthest advanced among the third year group. A study of the birth date records reveals that the average chronological age between adjoining groups differs from about 6 to 15 weeks. In general, the primary school is so organized that children at the various stages of maturity, especially mental maturity, are dealing with school experiences keyed to their levels of development.

The question arises as to how children who are not only at different levels of development but also are maturing and learning at different rates can be kept adjusted in groups at their level. It is one thing to classify and group at a certain time. It is another to keep well classified groups when the individuals within each group vary in amount of absence from school, rate of mental growth or I.Q., speed of learning, rate of physical and social development and other fluctuating factors. To meet these variables between pupils, the groups are made flexible both as to personnel and as to curriculum program.

In its operation the flexible progress group system, as adapted to the primary school in Western Springs, calls for giving two or three children in each classroom what is actually an individual program for short periods of time. A child who does more library reading, who develops reading skills superior to those of others in his group and who otherwise shows a definite upward tendency to get out of adjustment educationally with the rest of his group, may be given a temporary individual program. He may be permitted to work ahead of his group as far as covering the curriculum materials is concerned. When he has caught up to the level of the next group above, he is transferred into it. This ends his individual program, at least for a time, and he takes up his work as a regular member of the more advanced group.

Photographs from Roslyn Public Schools, Roslyn, N. Y.

No pupil at Western Springs ever repeats or skips a grade. Rapid learners are encouraged to broaden and enrich their store of knowledge and to engage in many kinds of project work before they go on to higher levels.

In similar way, but with reverse effect, a pupil who lags increasingly behind his group may get far enough in arrears so that the next oncoming group is at his level of learning. He is then transferred into this other group where he will be in better adjustment. Such a transfer, of course, does not involve any demotion or repeating of work covered. It is a straight adjustment from a group that has advanced beyond the individual to the next oncoming one that has caught up to him.

Again, a child who has had a protracted absence from school because of illness may be transferred on his return to the group then at the stage of his learning. In this way he takes up where he left off without having to tax himself with make-up work when physically debilitated.

Transfers of individual pupils from group to group in either direction are made any weekend during the year. They are made almost as readily from an extreme group in one classroom to the next level in the class above or below, as the case might be, as they are made from one group to another within a room. One caution that is observed is to make sure insofar as is possible that a transfer will improve a pupil's general adjustment. Effort is made to avoid making subject learning adjustments at the cost of social maladjustment. The total educational situation is considered.

No Time Limit Is Set

Any learning group may begin the work of the next grade, as tradition defines grades, at any time of year if the pupils are ready to go on with that part of the curriculum. Second grade curriculum materials may be undertaken by one group in March of the year the children began school. An average group would take up the same work the next September. A third, less matured and less rapid learning group, might start the second grade course of study the middle of November or some other time during the second year of school. Each fall all children take up their schooling where it was left off the preceding June. No attempt is made to force their development to fit the schedule of a grade a year, which really fits only the average pupil in any school.

A child who develops reading skills superior to others in his group and who may get out of adjustment educationally is given a temporary individual program.

At all times all children are making progress ahead. There can be no failure or repetition of a grade for any. No pupil skips a grade or misses out on any part of the curriculum. Some may cover the course of study of the primary division in two years. Others will require four years. Most pupils will cover the ground in three years. The flexible progress group system does much to fit the school to the developmental needs and capacities of the individual children.

Lest this article give the impression that the Western Springs primary school is one in which individual differences are cared for only by varying the rate of pupils' progress through school, a further explanation should be made at this point.

With rapid learners effort is made first to broaden and enrich their learnings at all stages before permitting them to go ahead to higher levels. Even though a child completes the basic materials of instruction for the first grade and tests grade 2.1, 2.5 or some higher mark of skill in reading, he is not necessarily allowed to undertake second grade work. The rapid learner is led to read almost everything that can be provided at first grade level and is encouraged to do more in the realm of project work before beginning second grade learnings.

This procedure does not seem to slow down the acquisition of skills, such as the reading skills, very much but it does tend to keep children who are maturing mentally at a rapid rate from covering the basic curriculum materials so fast that they pull far ahead in school grade classification and become out of adjustment socially and physically with others of the same level of learning. It also seems to help avoid the nervous and emotional dangers imminent when bright children vie with one another for class position.

In the flexible primary school most of the children are dismissed about thirty minutes earlier each afternoon than is customary in the average school. The majority of the first year pupils are dismissed early in the forenoon also. This leaves time each day for the teacher to devote her full energies to work with those who are falling behind their group, who have been absent or who otherwise need special attention. Thus, the laggard is given what he needs but not to the boredom of the quicker pupils. This device, of course, is one employed in many schools the country over.

Gains Are Obvious

The crucial question about any new system is, "Does it work?" The answer in this case is that it works most satisfactorily in Western Springs. The elimination of repeating and skipping grades has been the most significant gain of the plan.

Reading achievement, as measured by standardized tests, is well above national norms and above what it formerly was in Western Springs. A change of reading texts and methods probably accounts for at least part of the improvement.

Parents endorse the flexible progress group system as a change for the better by a majority of 14 to 1. The majority, too, believe that the children are happier under the new plan.

The teachers are unanimous in approving the system as superior to the traditional organization. They think the children are happier and more interested. Classes are easier to teach because of the lessened spread of learning levels within each room.

No Brand New Illiterates

HENRY H. HILL and RALPH CHERRY

ACCORDING to reports of the federal census bureau, illiterates, defined as those 10 years old and older who can neither read nor write, represented 20 per cent of the population above 10 years of age in 1870, 10.7 per cent in 1900 and only 4.3 per cent in 1930. In 1930 there were 98,723,047 persons over 10 years of age, of whom 4,283,753, or 4.3 per cent, were classed as illiterates.

This is a very large number of illiterates but viewed in the perspective of sixty years it shows a progressive eradication of illiteracy which on the whole is encouraging, especially since there is every reason to think that the next census in 1940 will reveal another big advance in literacy.

Much credit for progressive elimination of illiteracy is due to the adult education groups which have concentrated on this problem for the last 25 years, to the thousands of volunteer workers who have pioneered in this cause through moonlight schools and night schools, and, more recently, to the nationwide drive of the literacy teachers paid out of W.P.A. funds.

The common purpose of all of these workers, however, has been directed primarily at changing an illiterate into a literate, a desirable and commendable goal, but one that would eventually become unnecessary if the schools of the nation taught all children to read and write before the age of 10. The public schools have made rapid strides toward this achievement but can never succeed until they reach all the children of the nation at the proper time.

In order to do this, a permanent and continuing census has long been recognized as a necessity; yet today there are many cities and rural areas which have a census of a rather ineffective kind or none at all. Some large cities can afford comprehensive and expensive census departments but the average city, county or township must have a system which is simple and inexpensive and which can be operated with a minimum of personnel.

The responsibility for this job is lodged with the public schools, although cooperation may be legally required of private schools. Regardless of law, the administrators of private schools are human and can hardly be expected to view with enthusiasm changes in their record systems made purely to satisfy a public school census system, and from which changes they see little gain to themselves and much trouble. It seems wise, therefore, to have a census system that depends on the private schools not for primary and original information but only for secondary or confirming information which will require little of their time or energy.

Kentucky, in 1934, adopted a new school code that made compulsory the employment of census and attendance workers in every school district in the state and the installation of a permanent and continuing census of children between 6 and 18. The state department of education prepared and distributed a series of census and attendance forms which are, on the whole, excellent. Lexington, with about 11,000 children, continued to experience the same old difficulty of finding the children of the transient and underprivileged families immediately after their arrival in Lexington. Sooner or later the attendance workers would find them, or a neighbor would report them, but this delay of weeks or months produces in the long run either illiteracy or an inferior brand of literacy, especially since children of such parents need every possible day in school to compensate in part for the frequent moves and the poor home environment.

A combination filing system that is inexpensive and that gives a permanent census is a valuable aid in checking illiteracy

Faced with this condition the administration determined to work out a system that would be workable and inexpensive to install and maintain. An examination in two or three large cities revealed fine systems of permanent census cards and ingenious filing devices, all of which, it seemed, made it easy to find out much about an individual child, once the child was located and his name put on the census rolls. The difficulty in Lexington was finding the child at the proper time; it was relatively easy to locate and record all the necessary facts about the children on the census rolls but not so easy to find out whether all were on the rolls.

In analyzing the situation it was evident that, while families and children are mobile, houses are relatively permanent and can always be found. Hence the effort was concentrated on a system based primarily on houses rather than on children. The idea is not new but the particular setup finally worked out is different from any found and, after a trial of a year, seems to be working well. It is conceded by all administrators that no system will be entirely accurate at a given time but the Lexington plan has practical advantages in getting at the source of most of the trouble, namely, finding the children promptly with little expense in personnel. It seems worth describing briefly.

The unique feature of the Lexington plan is a combination house and family file. This file, maintained in addition to the usual permanent census, enrollment and precensus files, not only provides a convenient method of recording changes of resi-

dence but also furnishes valuable assistance in obtaining more complete and accurate information.

The index for the combination file is "tailor-made," that is, the guides are blank, the names of streets and the numbers of houses being written on the tabs as the file is set up. Two sets of guides are required (1) primary guides bearing the names of streets and (2) secondary guides indicating the numbers of the houses on each street.

The street guides are of the celluloid space-saver type, punched so that they may be fastened in the trays by means of rods. These guides are arranged in alphabetical order throughout the file.

The secondary guides are of bristol, punched in the same way as the primary guides. The numbers of the houses on each street are arranged in consecutive order. The tabs of the primary guides occupy the first and second positions in the trays while the tabs of the house guides occupy the third, fourth and fifth positions. Thus, the index for an entire tray is visible. The house guides are in two colors, to distinguish tenant-owned houses from those that are rented.

The family cards, bearing the essential data concerning the occupants of the houses, are filed back of the proper house guides. The data appearing on the family card are: (1) name of the family head, (2) race, (3) occupation, (4) names of children under 18, (5) dates of birth of such children and (6) the name of the school attended by each child. The address and the date of revision are written on the card in pencil, so that necessary changes may be made. The family cards are "cut-out punched" so that they fit over the rods but are not fastened in the trays. Blank cards are used to indicate vacancies in houses and apartments.

Information concerning new residents, removals and changes of address within the school district is received from the schools, the water company, the bureau of vital statistics, family welfare organizations, city records of transfers of deeds and building permits, and other sources. If the data were complete there would be no real need for the combination file. The changes could be recorded on the permanent census and enrollment cards directly.

The primary purpose of the auxiliary file is to indicate the direction that further checking must take. This function is performed in one of two ways. First, the information received from the regular sources frequently leads to the discovery of other changes that must be made. If the file indicates that two or three families are occupying a one-family dwelling, the checkup will lead to further corrections in the records. If the file shows that a house or apartment is vacant, this furnishes a lead toward the discovery of new residents.

Second, troublesome areas that require extra effort and attention are easily identified. These areas may require periodical canvassing but the combination file reduces the size and number of such sections of the school district.

The chief value of the combination file is the provision of more complete and accurate data but the scheme has other advantages. Since the plan does not depend entirely on the information supplied by the schools, it is possible to have the census up to date in September when school is to start, thus permitting the attendance worker to devote most of his time to getting children into school promptly. Also, the necessity for depending upon the private and parochial schools for primary information is removed. Only occasionally these schools may be asked to verify information obtained from other sources. Another advantage has been mentioned: the economy of operating the file.

Half Time, Half Pay

(*Continued from page* 23)

home. Years may pass before the home task can measure up to the teaching task in respect to service and influence. These years would be, as the teachers themselves freely admit, more worth while years if the young wife continued in her teaching activity for, say, a half-time capacity.

One who lives a life of service usually has a wide variety of interests. There are individuals all of whose service is devoted to one particular task, but these individuals are rare. As a rule, generous people do not confine their attention to one cause but rather spread it among many. A division of interests in the field of service does not necessarily destroy unity; in fact, a person may turn from one interest to another with fresh vigor, whereas his enthusiasm might have palled without the stimulation that comes from constant variety.

For this reason it would seem easy to believe that the young married teacher who devotes a half day to teaching and the other half to homemaking, instead of approaching both tasks with a lessened devotion, can approach them both with greater interest and enthusiasm. The division of interests lends variety to the contribution of service she has to make. This is, in reality, the case with a number of teachers consulted on the subject. The half-time teaching position really adds variety to the woman's life and enables her to tackle both teaching and household duties with freshness.

The quality of wholesome enthusiasm constantly exhibited by an excellent teacher is priceless in the teaching profession. Can we ever dispense with it? Can we afford to shut the door to an excellent teacher because she has met the most fundamental competition in a woman's life?

Rather than sacrifice a significant number of excellent teachers because of various surmountable arguments, wouldn't it be wiser to compromise and save these teachers for education by continuing them at half-time capacity? A plan such as this would render negligible the criticism of the taxpayer and the jealousy of other teachers. Keeping young married women in the teaching profession would save for education a proportion of most normal women teachers and this is an economy of fundamental importance.

Glencoe's Coordinating Council

PAUL J. MISNER

A garden club member aids the children in landscaping.

THE purpose of this article is to describe the attempt of one community to create means whereby all persons are given an opportunity to participate and cooperate in the improvement of community life.

The needs for creating some agency that will coordinate and facilitate the progressive development of social policies within the community do not arise through academic speculation and arm chair philosophizing. On the contrary such needs arise from the daily experiences of any individual who is seeking to serve the community.

The public school administrator is one person who is continuously reminded of these needs. The Methodist preacher calls on the telephone to protest that he cannot find a time when the boys' chorus can rehearse because the school usurps all of the boys' time. The president of the League of Women Voters calls at his office to complain that the school teachers fail to vote and take an active part in civic affairs. The garden club expresses disappointment with the planting and screening done by the board of education on the site of the new elementary school building.

The boys' work committee of the Rotary Club plans a youth survey and ignores the primary sources of information, the home and the school. The playground committee of the park board plans the summer recreation program quite independently of other interested groups. The chamber of commerce sponsors a Fourth of July celebration which tends to distort the values of citizenship that the schools emphasize.

Illustrations similar to the foregoing could be multiplied indefinitely by any public school administrator. In no sense should these illustrations be interpreted to mean an unfavorable criticism of the activities of any civic or social group. They simply suggest the need for some agency that will formulate policies, engage in long-time social planning and coordinate efforts.

When the problem is considered from the point of view of organized education the implications are even more significant. The school is but one agency concerned with the education function. The entire community educates whether professional agencies participate or not.

A realistic program of education will seek to utilize appropriate community resources, both persons and things, as the basis of socially significant learning experiences. The recent interest in the community school movement is evidence of a trend that will likely continue.

Ultimately, the concept of school with its emphasis upon intramural activities designed primarily for the immature will be replaced with the more inclusive concept of community education. All persons, adults as well as children, will participate in the enterprise and many educative experiences now ignored or only incidentally utilized will become essential and integral parts of a unified education function. The effective development of such a program of community education further emphasizes the need for some central planning and coordinating agency.

Recently a community coordinating council was organized in Glencoe, Ill., as a means of solving immediate problems and of working toward the development of a program of community education. The membership of the council consists of two representatives (a representative and an alternate) of each of the following civic and social groups: American Legion, board of education, caucus committee, chamber of commerce, community chest, council of churches, Daughters of the American Revolution, garden club, Junior League, library board, park board, parent-teacher association, Rotary Club, Threshold Players, village board and women's library club.

The council operates under a constitution which defines its functions, policies and plan of organization. The constitution provides for two officers selected by and from the membership, a chairman and a secretary.

Functions of the council are defined as follows:

1. To serve as a representative agency whose responsibility shall be long-time planning in the interest of the continuous improvement of community life.

2. To integrate and coordinate the individual and social needs of all persons within the community by formulating broad social policies.

3. To make specific recommendations to elective boards and related social and civic agencies that will suggest the means whereby community purposes can be achieved with the greatest degree of efficiency.

4. To emphasize continuously the education function as the dynamic social activity upon the success of which the improvement of community life will depend.

The constitution emphasizes the fact that the council is strictly an extralegal agency. Its recommendations are simply translated by the representatives to their respective groups for action. Further to safeguard the use of the council for partisan or undemocratic purposes the constitution provides that membership always is open to any individual or group that may desire to participate. In this connection it is important to note that the village manager, the superintendent of parks and the superintendent of schools are consultative members of the council but are not entitled to vote or to hold office.

Experience with the community coordinating council in Glencoe is too limited to permit the formulation of positive generalizations. A brief résumé of some of the achievements to date will indicate the possibilities that seem to be inherent in this and similar types of community organization now being worked out.

Prior to the organization of the coordinating council the problem of planning a program of adult education was complicated by the conflicts and duplications that existed among the activities of the various community groups. The development of a community calendar and the joint planning of the activities of all community groups in advance have eliminated most of the duplications and conflicts and made possible a well-balanced and unified program of adult education.

Through a period of several years the parent-teacher association has sponsored an intensive program of parent education and social interpretation. The problems, purposes and achievements of the public schools have been considered by groups of parents and teachers organized into special interest groups. These meetings dealing with the specific problems of the school system have been effective in developing understanding and support. Participation in these meetings has been limited, however, almost completely to the parents of school children. Nonparents as well as parents are concerned with the public school program. They are sources of educative and financial contributions.

The coordinating council is making it possible for all individuals and groups to participate in planning, executing and appraising the program of community education. In this way the basis of social interpretation is significantly extended and the understanding and support of an increased number of persons are being continuously achieved. The active participation of council members in a current program of curriculum revision indicates one possibility of how community participation may be secured.

As the school has sought to extend its activities beyond the walls of school buildings and to utilize community resources the coordinating council has been of great value. A group of fourth grade children has cooperated with the Daughters of the American Revolution and the historical society in developing a museum in the first cabin to be erected in the community. This historic building was recently moved to one of the school sites. The interest of the children was aroused. The cooperation of interested groups was sought through the coordinating council and a significant educative experience for both children and adults was launched.

In similar ways the council has been the means of bringing about cooperative enterprises between the safety patrol of the school system and the police department. The garden club and the student council of one of the schools have cooperated in a program of screening and planting around the school building. The playground committee of the park board has cooperated with interested groups in planning a more effective summer recreation program.

At the present time the council is making a survey designed to discover and record community resources. When the survey is complete each building in the school system will have available a complete card catalog indicating those individuals and agencies within the community that have contributions to make and the exact nature of their contributions.

The foregoing illustrations of the beginning achievements of one plan of community organization indicate some of the possibilities that may be expected when the organized education function is extended beyond the walls of school buildings. Whatever else may be said of the plan, it is an attempt to administer this function democratically.

An historical pageant became a significant educative experience for these fourth grade pupils, who, working with the D. A. R., developed a museum in Glencoe's first log cabin.

Kansas Answers Its Critics

W. E. SHEFFER

A study of the consolidation accomplished in Kansas through two new school laws has just been concluded by the superintendent of schools, Manhattan. He summarizes it

WIDESPREAD publicity has been given to the small one teacher schools in Kansas. Recently one metropolitan newspaper devoted an entire page of rotogravure pictures, accompanied by a long descriptive article, to a one teacher school in Cherokee County having only one pupil enrolled. The *New York Times* on Sept. 26, 1937, also carried a photograph and accompanying descriptive matter of the same county school.

The desirability of focusing the attention of Kansas people upon the problem of the one teacher school is admittedly important. There have been altogether too many one teacher schools and they are yet too numerous. Their maintenance is unduly costly and the quality of their service to the children and to the state is below any acceptable standard. The following table gives the factual basis for these statements:

Table 1—Number and Average Daily Attendance of One Teacher Schools, 1935-36

Average Daily Attendance	*Number of Schools*
1	39
2	131
3	202
4	338
5	393
6 to 10	2552
11 to 15	1898
16 to 20	820
21 to 85	272
26 to 30	95
31 to 35	27
36 to 40	5
41 or more	3

The average daily attendance per teacher was 11.1 pupils.

Newspaper publicity and the attendance table produce a most uncomplimentary impression of Kansas people and of Kansas school leaders. Fortunately, a full knowledge of how rapidly Kansans are closing their small one teacher schools should convince any fair-minded person that an honest and effective effort is being made to eliminate the small schools and to improve the educational opportunities for pupils who otherwise would attend them.

A study to learn what actually is being accomplished toward the reduction in the number of small schools has just been concluded. The study relates primarily to the effectiveness of two new laws, enacted to cause the abandonment of many one teacher schools. The laws are the Rees Cooperative School Area Law, enacted by the 1935 session of the legislature, and the School Equalization Law, enacted by the 1937 session.

The Rees Cooperative School Area Law encourages and facilitates the closing of small one teacher schools by sending the children to schools of adjacent districts. Briefly, the law provides that the county superintendents shall before April 1 of each year publish in the official county newspaper a list of the schools that might be discontinued if their children were sent to other schools, together with the probable financial saving that would ensue. In this manner the existence of unjustifiably small one teacher schools is advertised annually to the citizens of each county. Likewise, possible economies are made known to the taxpayers of districts in which savings could be effected by their districts' cooperating with adjacent ones. Copies of the county superintendents' statements must be supplied to district board members whose schools can be closed.

The procedures that may be followed in effecting the cooperation of two or more districts are set forth in the law. These procedures are simple. Three of the virtues of this statute are (1) its application involves no compulsion, (2) annual advertisement of possible economies to which reference has just been made and (3) the legal simplicity involved in the cooperation of two or more districts.

The State Elementary School Equalization Law provides that graded schools of two or more teachers are assured $27 per pupil in average daily attendance through the use of state funds on condition that the local district's levy of a 3 mill school tax is insufficient to make available $27 per pupil.

In practical operation the school boards of many elementary graded schools offer to care for the pupils from one teacher schools of the districts in the surrounding territory with no tuition charge or only a nominal charge. This apparent generosity can be extended to the one teacher districts because in many graded schools the per teacher enrollment is measurably lower than the number of children who can be effectively taught. Consequently, additional nonresident children can be cared for and for each the local district may receive $27 of state money while the district of the child's residence may save the cost involved in maintaining its own school.

In the process all gain. The graded district receives additional revenue without any accompanying additional cost; the one teacher district saves the cost of a one teacher school, and the children receive superior educational advantages.

On the basis of statistical evidence these new laws have been encouragingly helpful. From 1918 to 1928, 430 one teacher schools were closed; such schools were discontinued at the average rate of 43 a year.

The following table shows the number of districts that have not maintained their own schools and that have sent children to other

schools for each year since 1928, together with the increased number doing so for each year in comparison with that of the preceding year.

Table 2—Districts That Have Closed One Teacher Schools

Year	Districts With Closed Schools Sending Children Elsewhere	Increase Over Preceding Year
1928-29	227	....
1929-30	257	30
1930-31	260	3
1931-32	260	....
1932-33	276	16
1933-34	281	5
1934-35	278	....
1935-36	473	195
1936-37	537	64
1937-38	840	303

Prior to the school year 1935-36, there was no perceptible trend toward closing one teacher schools. The 1935 session of the legislature enacted the Rees Cooperative School Law. During the first year of its operation 195 districts closed their schools. This number is almost five times as great as the total number of schools closed during the preceding five year period. The number closed in 1936-37 was not so great as during the preceding year and yet it was one fifth greater than the total number closed during the five year period preceding the enactment of the law.

The 1937 session enacted the School Equalization Law and the rate of closing schools was greatly accelerated, because according to reports from the county superintendents during the year 1937-38, 840 one teacher districts are not conducting their own schools, but are sending their children to the schools of neighboring districts. This represents an increase of 303 schools over the number closed during the preceding year.

During the three year period 1935-38 the increase in the number of schools closed, 565, was more than eleven times the increase in the number closed, 51, during the preceding seven year period.

In 35 of the 105 counties of the state 12 per cent or more of all one teacher schools were closed during the last school year. In 23 counties representing 20 per cent of the entire number 20 per cent or more of the one teacher schools are closed. How generally schools are closed is shown in table 3.

In the process of making this study another interesting and significant set of facts was discovered, which shows how rapidly the enrollment in one teacher schools has been declining. During the school year 1924-25 there were 120,949 pupils enrolled in one teacher schools. For the year 1935-36, the last year for which comparable data are available, the enrollment was only 88,809, which represents a decline of 32,140 during the nine year period.

Recently, A. L. Evans, principal of the Miltonvale Rural High School, conducted a study in an attempt to learn how the quality of education is affected for children who attend schools in districts other than their own because of the closing of local schools under the provisions of the Rees Cooperative School Law. He studied the cases of 48 schools that had been closed and found, among other items, the following:

1. Before these schools entered cooperative areas, 11 per cent of their teachers held state certificates; 60 per cent held county certificates. After entering the cooperative areas, the children were taught by teachers, 60 per cent of whom held state certificates, while only 20 per cent held county certificates.

2. Before entering the cooperative areas, 43 of the schools had an eight months' term. After entering the cooperative areas, 22 had a nine months' term. Before entering the cooperative areas, the average experience of the teachers was 2.8 years; after entering the cooperative areas, the average experience was 4.7 years. Before entering the cooperative areas, the average teacher had 2.8 hours of college work. After entering such areas, the average amount of college training was 15.2 hours.

Along with all these superior educational advantages, there was a reduction in cost of 8.6 per cent, which really was lower than the typical experience should show because teachers' salaries were increased rather markedly the year these schools entered cooperative areas.

Mr. Evans found "that the children from one half of the cooperating schools were transported to city districts, which is a distinct advancement toward the provision of better educational opportunity. The teachers in the cooperative areas hold the better grade certificates and have more college training. More than half of the children from the cooperating schools were transported to schools with a nine months' term, whereas the schools they attended the year before were in session for eight months only.

"The findings and the opinions of the teachers and superintendents in charge of the cooperative areas are almost unanimous in favor of the plan. These results justify educational leaders in encouraging the Cooperative School Area Plan; possibly it will be the stepping stone to the formation of larger permanent districts or areas that will make for greater economy."

Table 3—Percentage of One Teacher Schools Closed, 1937-38

County	Per Cent of One Teacher Schools Closed	County	Per Cent of One Teacher Schools Closed
Shawnee	12	Kingman	24
Jewell	13	Ford	24
Lincoln	13	Wallace	26
Russell	14	Seward	27
Riley	15	Lane	29
Chautauqua	16	Pratt	29
Ottawa	16	Pawnee	30
Rooks	16	Norton	30
Comanche	17	Edwards	35
Chase	17	Morton	36
Reno	17	Stanton	36
Smith	17	Kearny	37
Barber	20	Clark	40
Rice	20	Finney	40
Meade	21	Wichita	40
Rawlings	22	Thomas	42
Stevens	23	Greeley	43
Osborne	23		

Pointers on Daylight Projection

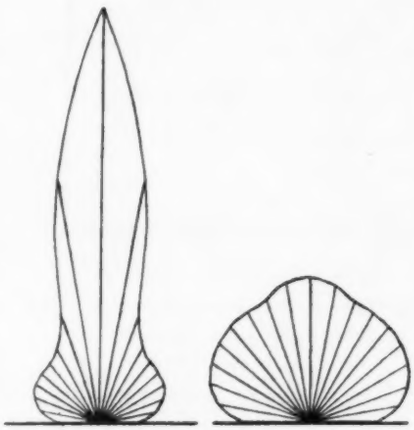
DONALD C. DOANE

THE motion picture, the glass slide, the opaque projector and the filmstrip all have recognized places in the modern curriculum, yet the nature of any projection equipment is such that proper consideration of certain basic factors will greatly increase its effectiveness as an aid to teaching. Such considerations are of particular importance when a projector is to be used in a room not totally darkened, a condition to be faced in most of the classrooms of the country.

Granted that so-called daylight projection is at best a makeshift, the fact remains that much, if not most, projection in the schools is, and probably will continue to be, done under such conditions.

In general, there are two types of screens, the plain screen and the so-called daylight screen. While the ordinary screen reflects the light approximately equally in all directions, the daylight screen concentrates the light in such a way that much more light is reflected within a narrow angle while correspondingly less light is reflected at greater angles. Figures 1a and 1b illustrate this action, the length of the lines indicating the relative intensity of illumination reflected at different viewing angles from a projector placed directly in front of the screen. In the case of the daylight screen, an angle of 20 degrees from the perpendicular will reduce the brightness as much as 75 per cent, depending upon the exact type of screen used. It is upon this concentration of light within a narrow angle that its ability to be used under daylight conditions depends.

The degree of room coverage for a daylight type screen is shown in figure 2. It is of utmost importance, unless the room is totally darkened, to see that all pupils are seated within an area approximately as shown. Those seated at the sides toward the front will experience considerable eyestrain and will see little or none of the projected picture.



Reflection characteristics of daylight as compared with ordinary screens. Length of radial lines indicates relative brightness.

The problem of screen placement rarely is accorded the consideration it deserves, particularly in semi-darkened rooms, yet this factor is important enough to bring many a projector out of a dusty closet. Even if the room is semi-darkened, the amount of light varies from place to place in the room. First of all, one should assure himself that as little light as possible falls on the screen and for this determination the eyes cannot be trusted.

Illumination on the screen in different positions in a typical room is shown in figure 3, in which the room light was 8 foot candles, a fair reading light. There were no provisions for darkening, but the room was on the shaded side of the school. With the screen in the conventional position, directly in the front center, there were 8 foot candles shining on it and projection was impossible. Experimentation provided the different illumination readings on the light meter as shown in the diagram.

When the screen was placed in the position shown to have 2 foot candles of illumination, a thoroughly satisfactory motion picture was projected that could be viewed by about half of the pupils in the classroom. Doubling up in seats enabled the picture to be shown to all pupils. With the screen in the usual front center position it was impossible even to read titles.

To determine the best screen position in any given room if no light meter is available is largely a matter of cut and try. If a light meter is available, so much the better. It must be remembered that the eyes cannot be trusted to locate the darkest spot. Without a light meter, it is necessary to try the same picture and projector with the screen in various positions about the light or semi-darkened room. In the room mentioned, the next to the worst position, having an illumination of 7 foot candles, appeared to the eyes to be the best. The screen position finally used in this room was extreme, but the room light was more than will usually be encountered if there is any provision at all for darkening.

I have had considerable success by placing the screen just inside the door of an otherwise darkened closet. Thoroughly satisfactory projection with a 200 watt 16 mm. motion picture projector has been obtained by this method with no blinds drawn, a particularly desirable feature on hot days. The room itself, in one test, was illuminated to 15 foot candles, yet less than 1 foot candle fell on the screen.

In considering the problem of selection of any type of projection apparatus or of its use, particularly under daylight conditions, we must first understand the fundamental problem of contrast. Any picture, a projected picture, a photograph, a printed picture, in fact, this page of print, is as distinguishable as the degree of contrast between its light and dark portions; in other words, the greater the ratio between the light reflected from the light portions and that reflected from the dark por-

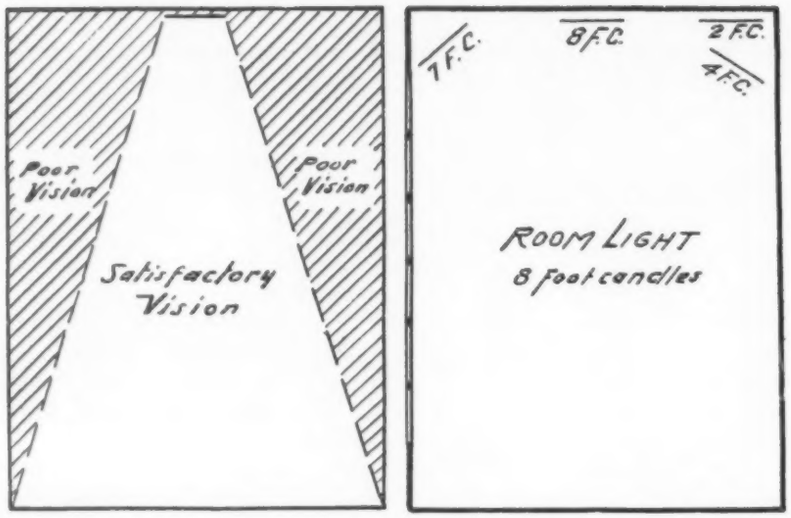


Fig. 2 (left) illustrates the area in which satisfactory vision is obtained by using a daylight screen. Fig. 3 shows the illumination on the screen in various positions owing to room light in a classroom.

tions, the clearer and more distinct will be the picture.

Imagine a picture projected on to a screen in a semi-lighted room. Even before the picture was projected, there was a certain amount of light on the screen. Now with the picture on the screen, the totally dark portions of the picture are illuminated by the amount of room light only, while the lightest portions are illuminated by the room light plus the light of the projector shining through the lightest part of the slide.

Suppose the light on the screen in a classroom is 5 foot candles—well below that usually recommended for normal lighting, but still light enough for reading for short periods —and the projector is capable of throwing 2.5 foot candles on the screen in the lightest portion of the picture. We have: (1) illumination on the screen from room light, 5.0 foot candles; (2) illumination on the screen from projector (light part of picture), 2.5 foot candles; (3) brightest part of picture—(1) plus (2), 7.5 foot candles, and (4) darkest part of picture—(1) alone, 5.0 foot candles. We then have a contrast ratio of 7.5 to 5 or 1.5 to 1 between the lightest and darkest portions of the picture.

While no exhaustive studies have been made, I have found that this ratio will provide a fully recognizable picture. It is, however, none too good from the standpoint of eyestrain and should not be used for more than a reel or so at a time. Nevertheless, I have set it as the minimum acceptable ratio. Some may desire after experiment to set the minimum higher.

A ratio of 1.5 to 1 is obtained in a projector capable of throwing an illumination on the screen equal to one-half of the room illumination. Thus, it may be seen that if the amount of light on the screen is known, it is a simple matter to determine whether or not a given projector will produce a clear picture.

Similarly, the adaptability of various projectors in the several rooms of a school system can be predicted without resorting to the difficult and expensive method of trying each projector in each room. All that is needed is a light meter and a table showing the illumination supplied by various types of projectors. Any light company will gladly lend such a meter, which reads directly in foot candles, if the school does not possess one. Illumination power of various projectors is shown in table 1.

To illustrate the use of this table, let us suppose the light on the screen owing to room light is 6 foot candles. Since we must have projection equipment capable of giving illumination equal to one-half of the room illumination, the projector must be capable of providing an illumination of 3 foot candles over the area of the screen. Now, if the screen has an area of 10 square feet, an average glass slide projector, according to the data of table 1, will provide an illumination of 36 foot candles, 10 times that needed.

Under the same conditions an opaque projector will provide only 8/10 of a foot candle, less than one-third that needed for satisfactory projection. Similarly, it may be seen that a 200 watt 16 mm. motion picture projector will be unsatisfactory, while a 500 watt motion picture projector or a 200 watt film slide will be fair, and a 750 watt motion picture projector will be satisfactory.

If an opaque projector or a 200 watt motion picture projector is to be used, it will be necessary to reduce the size of the picture or to provide better facilities for darkening the room. If the room is totally darkened, any projector may be used as the contrast ratio becomes greater.

It should be noted that the illumination provided by the slide portion of a combination slide opaque projector is approximately one-fifth of that provided by a straight slide projector with the same power lamp.

Since these figures are for films and slides of average density, there will be considerable variation from film to film and slide to slide. Hence considerable latitude should be allowed. If anything approaching borderline quality is indicated, its use will frequently be found undesirable. Nevertheless, in actual test, the variations are not sufficient seriously to affect the validity of predictions.

Table I — Illumination Provided by Typical Standard Projectors (in Bright Parts of an Average Picture)

Equipment	*Lumens**
Glass slide (500 watt)	360
Glass slide as part of opaque slide combination projector (500 watt)	74
Opaque (500 watt)	8
16 mm. motion picture projector (200 watt)	18
16 mm. motion picture projector (500 watt)	60
16 mm. motion picture projector (750 watt)	90
Filmstrip (200 watt)	63

*One lumen will give 1 foot candle illumination on a screen with an area of 1 square foot. To determine the number of foot candles any one of these projectors will give on a given screen, the foregoing figures should be divided by the area of the screen. For example, the foregoing glass slide projector will give an illumination of 36 foot candles on a screen 10 square feet in area.

Tenure in Pennsylvania

M. M. CHAMBERS

An important new departure in tenure laws is that of Pennsylvania, which dispenses with probationary service and puts all teachers on tenure status

THE essential principle of teachers' tenure is simple. It is merely that the teacher's employment shall not be subject to sudden and arbitrary termination. This means that dismissal or demotion shall not occur except with the consent of the teacher or, in the absence thereof, only after due notice and a fair hearing in which charges supporting one or more legally specified causes are presented and proved. The effect of putting this principle into practice is to lift the satisfactory teacher above the hazards of transient or casual employment.

The constitutional power of a state legislature to enact teachers' tenure statutes has been repeatedly sustained by the highest courts in Indiana, California and other states; in two cases recently before the U. S. Supreme Court, tenure laws have been construed without any indication that they contravene either the federal or state constitutions.

Under these circumstances, it is somewhat surprising that the tenure act in Pennsylvania, which became a law on April 6, 1937, was assailed as unconstitutional on several grounds, and it is not to be wondered at that its constitutionality has been upheld by the state supreme court in an eloquent opinion deciding simultaneously eight cases that had been appealed from different parts of the state.[1]

No doubt the cause of the litigation may be partly ascribed to the time and manner in which the new tenure law went into effect. In order to understand the situation it is necessary to see it in relation to to earlier Pennsylvania statutes touching the employment of teachers. For several years Pennsylvania had had what is commonly called a "continuing contract" statute, stipulating that teachers' contracts should automatically continue from year to year unless terminated by one of the parties by giving notice at least sixty days before the end of the school term. This was a relatively small limitation upon the powers of school boards in view of the fact that the contract could be terminated at the end of any school year without any stated cause provided only that the required sixty day notice was given.

It will be observed that the tenure act of 1937, effective April 6, went into force at a time in the year when some teachers would have already received notice that their service would end with the academic year. The new act contained the following mandatory clauses: "All school districts in this commonwealth shall, within thirty days after the effective date of this act, enter into contract, in writing, with all professional employes now employed by them . . . ." and "No contract in effect at the enactment of this act shall be terminated except in accordance with the provisions of this act."

Specific causes for the removal of a teacher were enumerated in the act and either dismissal or demotion in rank or pay was forbidden except upon proof of charges at a public hearing after due notice, if requested by the teacher concerned. Provision also was made for appeals to the court of common pleas.

Anyone familiar with the glacial sluggishness with which some local boards of education conduct their deliberations must suspect that the effect of the foregoing statute, applicable to a whole state, would be similar to that of a bombshell and must realize that, regardless of the noise of its detonation, it would nevertheless fail to galvanize some boards into the required action within the specified time.

Such was the case. The eight cases appealed to the state supreme court all involved the rights of employes who were in service when the act went into effect and who had received notice that their contracts would be terminated at the end of the school year under the old law. All had been refused new contracts and all prayed for writs of mandamus to compel their respective school boards to contract with them as required by the new tenure act. All were successful in the lower courts and all the judgments were affirmed in a cogent opinion written by Mr. Chief Justice Kephart.

One of the plaintiffs was a school dentist. The contract form prescribed in the tenure act specifies that the employe will "teach," although another section plainly provides that all professional employes of the public schools, including certified school nurses, dental hygienists and the like, are within its application. The court held that in these circumstances "a construction must be adopted that will make effective the legislative intent" and that a proper word may be substituted for the word "teach" in the dentist's contract.

Another plaintiff who was a classroom teacher had been notified that not only her services would end with the school year but also that a new teacher had been appointed to succeed her at the beginning of the next year. Said the court: "It is of no moment that another teacher was appointed" and went on to point out that the newly appointed teacher's rights were not before the court and could not be adjudicated in this proceeding.

A third plaintiff was a high school

[1] Malone *v.* Hayden, et al., and seven other cases, (Pa.), 197 Atl. 34 (1938).

principal who had been notified that he must either sign a contract as an ordinary teacher or leave the service at the end of the year. He had acquiesced and applied for an ordinary teacher's contract but the board had failed to notify him of his appointment until April 13, a week after the new law became effective. Thereupon he refused to sign the proffered teacher's contract and demanded a new contract as principal of the school. The court sustained his demand, holding that the plain words of the new act permit no other conclusion.

A fourth complainant was a supervising principal whose school board contended that as such he was a public officer removable at its pleasure and not within the purview of the tenure act. This contention, obviously not borne out by the wording of the act, was based chiefly upon the fact that district superintendents of schools are not covered by the tenure law. In the popular mind the status and duties of supervising principals and district superintendents in Pennsylvania seem similar but the court held that there are sharp and important legal distinctions between the two positions.

The arguments by which it was sought to assert that the tenure law was unconstitutional were numerous, diffuse and, in the main, trivial. In brushing them aside, the chief justice dwelt at some length upon the importance of public education as a function of the state and made it plain that the constitutional command to the legislature to maintain a system of public schools requires that each succeeding legislature shall have unhampered power to make changes in the school statutes to fit new conditions. Thus, all contracts made with school districts are subject to the possibility that subsequent changes in the statutes may modify their operation.

This statement is in harmony with the pronouncements of the U. S. Supreme Court in the New Jersey tenure case discussed in an earlier number of The Nation's Schools.[2] It meets and overturns the contention that when a state enacts a tenure law it thereby deprives future legislatures of full control over the school system.

Summarizing the court's reaction to the foregoing and other contentions against the act, the opinion contains an admirable legal definition of the purpose of teachers' tenure: "The teachers' tenure act was designed to secure to the citizens of Pennsylvania a competent and efficient school system by preventing dismissal of capable teachers without just cause. It is clear that the legislature did not intend that the act should confer any special privileges or immunities upon the teachers themselves to retain permanently their positions regardless of merit or the future policy of the legislature as to their employment."

The enactment of the tenure law in Pennsylvania, the second most populous state in the Union, and its triumph in the courts of that state are steps in the progress of the teaching profession. Hitherto statewide tenure laws have generally carried the requirement of probationary service of from three to five years in the same school corporation before a teacher becomes eligible for an indefinite contract.

The real utility of this provision is open to question, especially in view of the fact that it has offered a loophole by means of which obdurate school boards have often evaded and virtually nullified tenure acts. At least partly for this reason, the statewide acts in California and Indiana have each been amended to relax their application in small rural districts.

The Pennsylvania act dispenses entirely with the idea of probationary service and puts all teachers on a tenure status. It comes as a natural evolutionary extension of the principles embodied in the earlier "continuing contract" laws in that state. Thus, in a sense it marks an important new departure in tenure legislation and its future operation and administration will be of great interest to all who watch the development of our great American system of public schools.

[2]Phelps *v.* Board of Education of Town of West New York, 116 N.J.L. 412, 185 Atl. 8; affirmed, 300 U.S. 319, 57 S. Ct. 483, 81 L. Ed. 674 (1937). Discussed in The Nation's Schools **21**:39 (April) 1938.

High School Convalescent Room

MANY services can be given by schools to pupils with health handicaps. One such is the convalescent room with beds at the University High School, Oakland, Calif., described in the *Journal of the American Medical Association* by George A. Rice, the principal.

Many physicians make use of this room to get children back to school more quickly.

In University High School pupils are referred to the convalescent room from the following sources: attendance office, classroom teachers, pupils themselves who fear they have a weak heart or tuberculosis, school physician's follow-up, parents, candidates for health certificates from athletics, and school officials who wish to protect the school against liability for injury to pupils engaged in school activities.

Out of the health service program has grown a surprising list of adjustments that may be made in the school load; short days, light academic programs, lightened extracurricular programs, modified school routines, modified classroom procedures, lightened assignments of work, financial assistance and delayed graduation.

A report by letter is made to physicians of the activities of the school, curricular and extracurricular, and the doctor's advice as to modifications of his patient's program is asked.

Physicians are giving more information to the school than formerly, not only stating a wish that the pupil be excused from physical education but giving information on which to base a modified program.

The school never makes a contact with the physician without the consent of the parent. No child is ever programmed for an activity that the physician has said might be harmful. The school never recommends a specific doctor.

LIBRARIES ...AND... ADMINISTRATION BUILDINGS

Above: The attractive school library at Lake Placid, N. Y., a real cultural center. Left: Office of the superintendent of schools in the new administration building, Oak Park, Ill. Below: One section of the main lobby of the Oak Park administration building. The supply service for 11 schools is centralized under this roof.

THE SCHOOL PLANT

An Eye to Business

WILLIAM J. HAMILTON

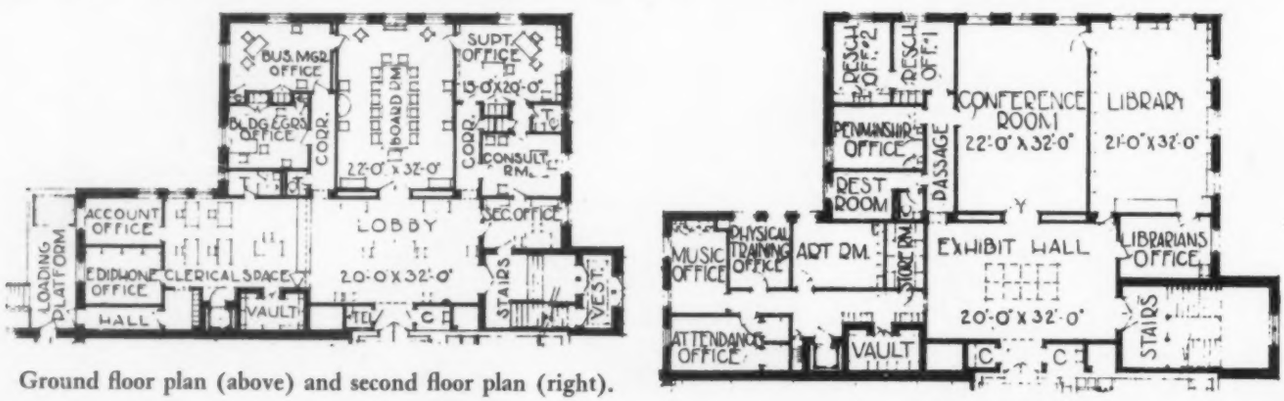
THE period of financial stringency through which the public schools of the nation have been passing has not been devoid of certain benefits. The necessity for operating upon uncertain and greatly restricted income has resulted in more careful planning and increased attention to the administrative problems in school management. If we accept the modern view that administration is a function of instruction and tends toward implementing the work in the classroom, we will have to admit that improvement in administrative technics will be reflected in the improvement of teaching service.

In the effort to improve instructional service, attention has been called to the inadequate physical equipment provided for administrative headquarters in many school systems. This situation is being met in forward-looking communities by the erection of buildings especially designed for the use of the business and supervisory staff. In some instances these new buildings for administration have been elaborate structures designed to meet the demands of large school systems; in other cases the buildings have been more modest in design.

As an example of a school administration building planned for convenience and adapted to the needs of an elementary school system, the new administration building recently erected at Oak Park, Ill., is worthy of consideration.

Oak Park is a residential suburb immediately west of Chicago. It has a population of between 60,000 and 70,000 and holds a unique position among American municipalities as it has retained a village form of government over a long period of years. There are eleven elementary schools in the village under a board of education consisting of nine members and a president, all elected at large by the voters of the district. The first superintendent of schools was employed in 1876 and the community has the unusual record of having had but three superintendents from 1876 until the present time.

Since 1876 the office of the superintendent of schools and the headquarters of the board of education have been housed in sections of old school buildings made available when not needed for classrooms. Under these conditions there was no centralization of supply service and serious inconvenience in business management. Realizing the loss in operating efficiency on the part of the administrative and supervisory staff working in crowded and inadequate quarters, the board of education authorized a study of ways and



Ground floor plan (above) and second floor plan (right).

means to improve on the situation. Upon the basis of a survey of the problems incident to the administrative services throughout the entire district, it was recommended that steps be taken toward the erection of a new administration building adequate for housing the entire administrative and supervisory staff.

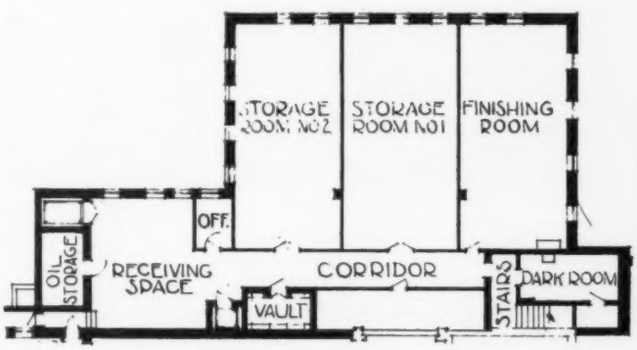
Following the generally accepted procedure in the functional planning of school buildings, box graphs were constructed as shown in figures 1 and 2. The layout in figure 1 shows the relationship established between the board of education, the superintendent of schools as the executive officer of the board and the divisions of (1) building service and supplies, (2) secretarial service and (3) business management.

A similar analysis was made of the department of supervision and instructional service as shown in figure 2, where the board of education maintains relationship through the superintendent of schools with the divisions of (1) methods and research, (2) general supervision and (3) special supervision.

With definite organization and plans in mind, rough sketches were made and submitted to Childs and Smith, Chicago architects. Preliminary sketches were made and submitted to each member of the administrative and supervisory staff for criticisms and suggestions. By this method every minor detail was given consideration by the persons most concerned with the functional aspects of the building plans.

The building occupies a site near the center of the school district and convenient to transportation. It is constructed of fireproof materials to meet the provisions of the state and municipal building codes. The exterior is of a dark red tapestry brick

Board room of the Oak Park administration building (above); plan of the second floor (below) and office of the business manager (right).



A conference room designed for group meetings of teachers and supervisors adjoins a room designed for curriculum exhibits. The walls are of plywood.

An attractive lobby welcomes the visitor. Adjacent are the modern offices of the superintendent and the business manager. The board room also adjoins.

To maintain a program of in-service training for the teaching staff, a professional library is provided, with educational books and magazines and sample texts.

Simplicity is the keynote, as might be expected in a business building, yet the effect is pleasing. Childs and Smith, Chicago architects, designed the building.

The building is near the center of the district and convenient to transportation. Here are shown the loading platform and electric hoist.

One of the supply rooms. Note the bar joist construction.

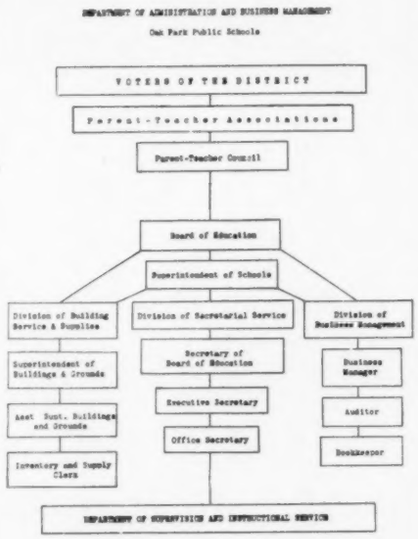
in a range of three selected colors. The cement floors have been poured on steel bar joists in preference to the heavy pan construction usually specified in the designing of school buildings. Being located in a business section, it is readily accessible to those who desire business and professional contacts with school officials.

The ground floor level is devoted to the supply service consisting of separate sections for instructional supplies, janitor supplies and reserve furniture and equipment. Fireproof storage is provided for oils, chemicals and combustible materials. A convenient loading platform and electric lift reduce the handling of supplies to a level of great convenience.

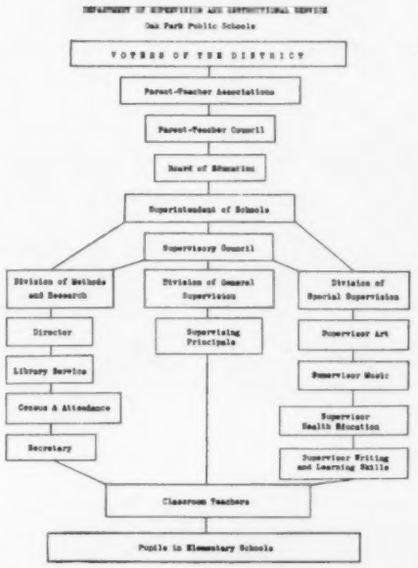
The second floor features the board room as the center of emphasis, with administrative offices for the superintendent of schools, business manager, superintendent of buildings and grounds and the secretarial staff in convenient arrangement adjacent to the board room. An attractive lobby completes the grouping of business units.

Floors are of linoleum and rubber tile in the lobby and outer offices, while rich carpeting in well-chosen colors adds dignity and quiet to the private offices. Ceilings are acoustically treated; sidewalls in natural-finish mahogany paneling add to the richness of appearance and restful conditions for work.

The third floor provides for the offices of the supervisory staff. The



Figs. 1 and 2 form the bases of the building's functional plan.



central feature of this plan is a room especially designed for curriculum exhibits. Walls are of plywood covered with canvas and painted in a neutral gray. This arrangement makes it possible to use nails and thumb tacks when displaying samples of work from all departments of instruction. Immediately adjacent to the exhibit hall is a conference room designed for group meetings.

In order to maintain a program of in-service training for the teaching staff, a professional library with a complete collection of professional books, sample textbooks and educational periodicals has been made available and is a convenience greatly appreciated by professionally minded teachers. The arrangement of offices on this floor is designed to meet the needs of supervisors and teachers.

Fireproof vaults are provided on each of the three floors. A service elevator is an added convenience frequently omitted in many office buildings designed for administrative use. Heating and ventilation are of modern design and under automatic control. Provisions have been made for future installation of air conditioning.

A modern well designed and carefully furnished school administration building adds dignity to a school system. The increase in efficiency in transacting business and the convenience in rendering professional services on the part of the supervisory staff ensure continuous and ample returns on the capital outlay.

Laying Out the Library

A. F. GILBERT

LIBRARIES in schools are not exempt from the law of evolution. Fifty years ago a library was a book dormitory seldom utilized or a museum wherein all books reposed, usually behind glass and almost always under lock and key.

Today the modern school library is the center of all cultural activities and its function is to collect and preserve books, making them conveniently accessible to readers. Therefore it becomes the duty of the architect to plan the library so that these functions may be efficiently performed.

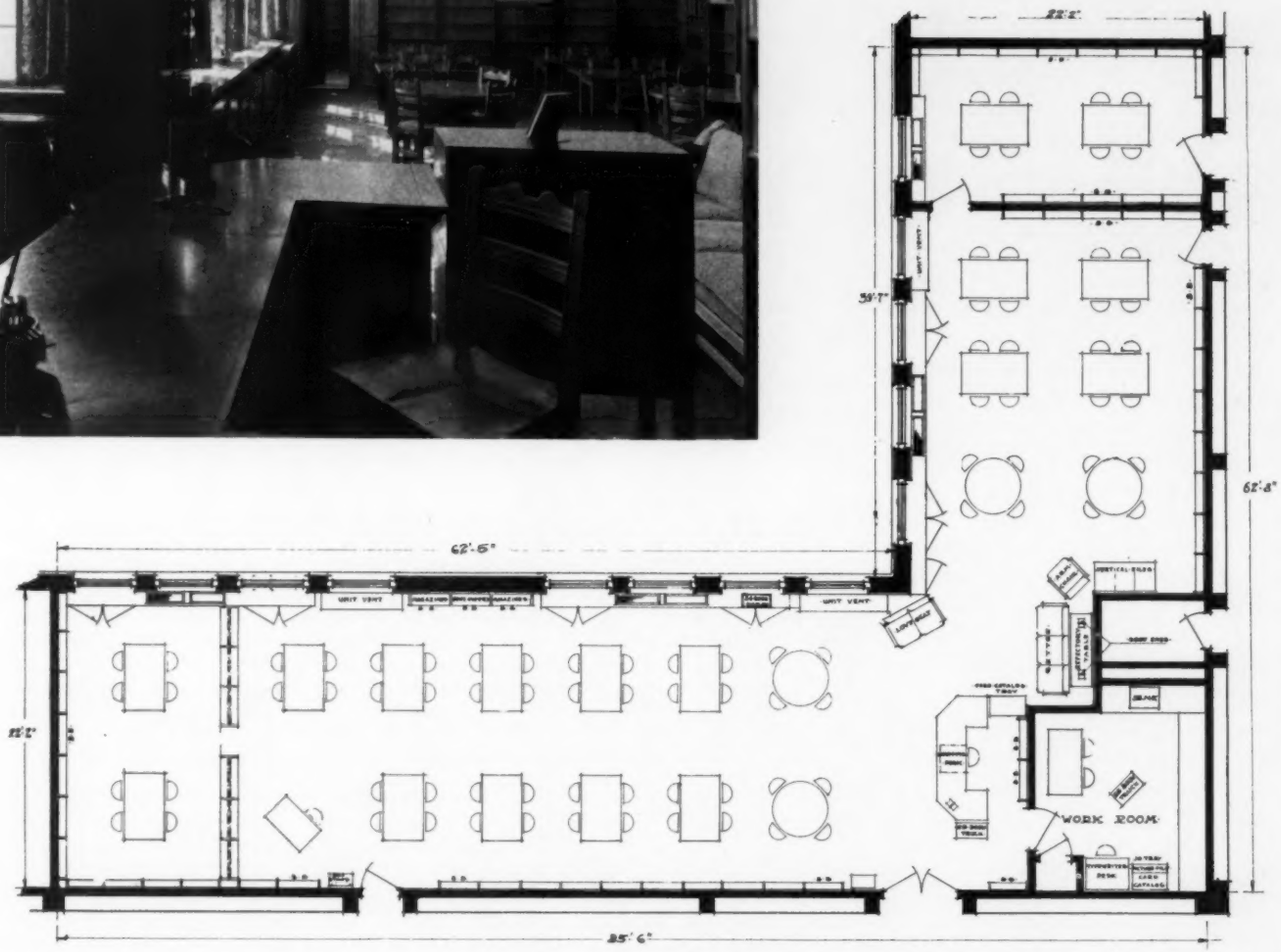
Colonial furnishings are in keeping with the design of the building. The upholstered pieces are done in a color to harmonize with the draperies.

The fundamental demand upon the architect is that he must first give consideration to the utility of a designated space. His function is to produce a result in plan that will be adequate and satisfactory; also to obtain a design of the allotted space as fitting and beautiful as may be commensurate with funds available.

The architectural trend in modern school design is to make the school library the focal point of school studies. With the expanding functions of the library in teaching methods, it has grown to meet the demands made upon it.

In the present day when pupils using the library are not under close supervision, an atmosphere of dignity is not only permissible but desirable, for this unit should be made inviting, comfortable and homelike. The aim is to eliminate as far as possible the severe atmosphere of the

Designed in the shape of an L, the library at Whitesboro Central School has a general reading room with a browsing nook at the far end, separated by double-faced book shelving, thus affording space for group work. Display cases and bulletin boards are used to call pupils' attention to new books.



old time study hall with its laboratory appearance.

The Whitesboro Central School building, Whitesboro, N. Y., was planned for an ultimate capacity of 1377 pupil stations in a junior and senior high school. The space allotted for the library was originally set up in its present size and arrangement but in view of the fact that the school was of large capacity and the fact that the board of education desired an efficient library unit the services of a specialist were enlisted.

In this library are found such features as: (a) adjustment of shelf space to the problem of accommodating books of varying heights, (b) the varying growth of collections in subject divisions, (c) an intricate catalog system, (d) efficient administration and (e) equipment for book and magazine repair.

A skillful architect should know how to design a library from an architectural standpoint, but for the proper functioning of so important a unit an expert in this highly specialized field should be brought into consultation. Indeed, if the architect is wise he will begin these conferences early in his planning.

The unique arrangement in "L" form of the library at Whitesboro eliminates the necessity for a room of excessive length and permits more efficient administration. It provides a general reading room with its browsing nook, separated by counter height double-faced book shelving, affording space for group work.

To the right of the charging desk is a conference room for smaller groups, in which pupils may work upon plays or debates or do individual research. This room also may be used as a seminar. A large workroom has been provided convenient to and in the rear of the charging desk. This plan permits an arrangement of the furniture which brings pupils and books close together and allows effective supervision and administration.

The Whitesboro Central School building is of Colonial design and this period of architecture has been

carried out in the library trim, paneling, shelving and furniture.

Walls are lined with book shelving, containing wood backs with paneling to the height of 7 feet. This affords a uniform color scheme into which is woven the door and window trim. Special paneled counters have been placed under the windows to enclose all heating and ventilating units and to furnish added storage space.

Floors throughout are of thick cork tile and the ceilings and walls above the book shelving line are acoustically treated. The book truck is equipped with pneumatic tires and this further eliminates disturbing sound.

The lighting system is of the indirect type appropriate for relieving of eyestrain and yet illuminating the room to an excellent degree.

As the library is the heart of the school, so the charging desk is the heart of the library. The desk in this library is located where the librarian has complete supervision of both wings; the desk is sectional in type in order that additional sections may be added as required. An assistant librarian's desk is placed at the entrance door for checking purposes; this task is taken care of by a pupil assistant. While there are only four seats at a table at present, later each table will accommodate six, making the total seating capacity of the library 120 pupils.

A special display case with bulletin boards is provided in order that new books or special collections may be brought to the attention of the pupils.

The catalog file is easily accessible to both wings of the library and is convenient for the librarian in rendering assistance to the pupils. At the left and easily accessible from the charging desk is located the workroom, equipped with sink, running water, work table, typewriter desk, shelf list file, correspondence file and spacious storage shelving for use in the repair of books.

All furniture and trim are of selected maple finished to match in color.

In carrying out the idea of a cultural center, there have been provided a comfortable settee, a love seat and an easy chair, all upholstered in a rich soft color to harmonize with the draperies. Back of the settee is a console table upon which an attractive table lamp has been placed.

Perhaps these refinements are, in part, the reason why this library has no disciplinary problems. According to the librarian, "the room is so homelike and so full of library atmosphere that the minds of the pupils are concentrated upon the books they are reading and their work."

Fire Checkup in Milwaukee

AS PART of its program for eliminating fire and other hazards, the Milwaukee public school system has issued two "Self-Inspection" blanks that deserve careful study. One of these is a "Self-Inspection" blank for the school plant generally, while the other is designed specifically for school stages. Questions were compiled from many sources, but B. J. Jelinek, chief of the bureau of buildings and grounds, is responsible for the arrangement of the material and the "answer" columns.

As will be seen in the form reproduced, the questions are so stated as to require answers of "Yes" or "No," a negative answer indicating an unsatisfactory condition. These answer columns have been found to be convenient in reviewing the reports and in comparing the reinspection reports with the originals.

"Reinspections by inspectors of the board are ordered when unsatisfactory conditions are reported," according to G. E. Wiley, architect, bureau of buildings and grounds. "A future revision of the blank contemplates assembling all items in which unsatisfactory answers reflect substandard housekeeping from the items that require building alterations before satisfactory answers are possible. This separation will provide a periodical check on the progress of our program for the elimination of fire and hazards of other types."

Self-Inspection Blank for Milwaukee Public Schools

Instructions: Inspection is to be made between the first and fifteenth of the month by the engineer-janitor and the principal, or a member of the faculty assigned by the principal. At this inspection all questions shall be answered and the report filed by the eighteenth of the month with the secretary of the board of school directors. Detailed inspection of stages in junior and senior high schools is to be reported on the special stage report blank (Form 9265).

If precautions are taken to minimize the danger of fire and to provide for safety in case fire occurs, real progress will be made in safeguarding life and protecting property. Intelligent thought and care in practice can eliminate practically all fires within schools.

Questions are so worded that a negative answer indicates an unsatisfactory condition.

Class: Senior.....; Junior.....; Elementary.....; Name of School.....
No. of Stories.....; No. of Classrooms.....; No. of Barracks.....; Date:.....193..

	Yes	No
1. Are all exit doors equipped with panic locks?		
2. Are these locks tested each week to ensure ease of operation?		
3. Do they fasten tightly so that additional locks, bolts or chains are not necessary?		
4. Are such additional locks open whenever the building is in use?		
5. Are all outside fire escapes free from obstructions and in good working order?		
6. Are they used for fire drills?		
7. Are doors from fire escapes kept open during school hours?		
8. Are doors to fire escapes tested each morning?		
9. Is all heating equipment, including flues, pipes and steam lines: (a) In good serviceable condition and well maintained?		
(b) Properly insulated and separated from combustible material?		
10. Is the coal pile inspected periodically for evidences of heating?		
11. Are ashes stored so as to touch only concrete, brick or metal?		
12. Are all of the following locations free of accumulations of waste paper, rubbish, old furniture, discarded stage scenery, etc.?		
(Check if not free): Attic...; Basement...; Furnace Room...; Stage...; Stage Dressing Rooms...; Other Locations		
13. What preparation or material is used for cleaning or polishing floors? .....Quantity on hand.....; Where stored?		
14. Are snop motors kept free from dust?		
15. Is space beneath stairs free from accumulations or storage?		
16. Is sweeping compound kept in tight metal containers?		
17. Are only approved self-closing metal cans on 4-inch legs used for storage of oily waste, polishing cloths, etc?		
18. Are approved metal containers with vaportight covers used for all flammable liquids such as kerosene, gasoline and acetone on the premises?		

(*Continued on page* 50)

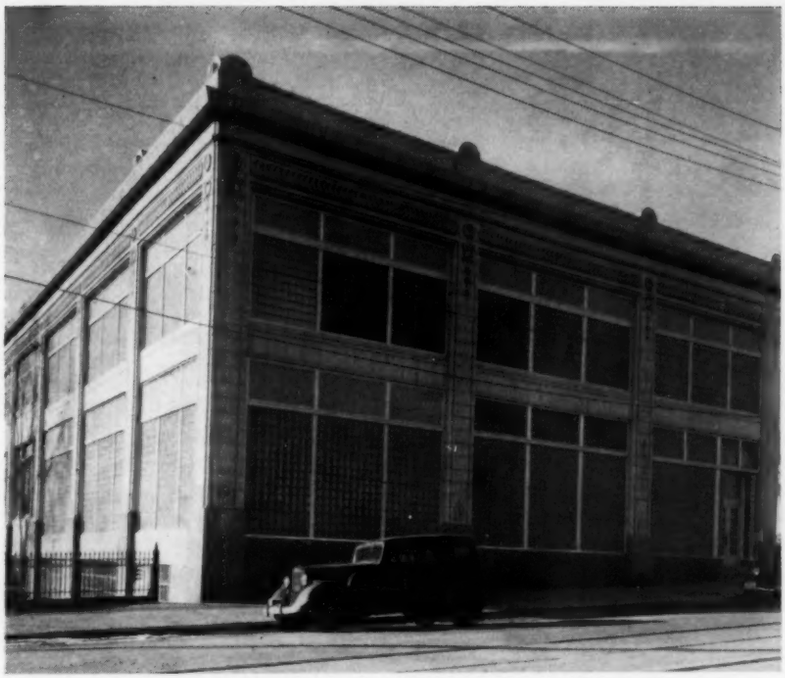
Accessible at Three Levels

THREE level accessibility for all delivery trucks and maintenance cars is a notable feature of the new administration building of the Sioux City public schools. Ramps at first and second floor levels are at the back and entrance to the basement is from an alley at the side. This arrangement facilitates loading of school supplies.

The building, 75 by 150 feet, is of reenforced concrete, faced with terra cotta brick above the granite blocks at the sidewalk level. Originally designed for automobile sales and service, the building was purchased by the school board for $30,500 and an additional $35,100 was spent in remodeling. The plate glass windows were replaced with hollow glass blocks.

Administrative and supervisory offices are air conditioned. Ceilings of all first floor offices are covered with acoustical fiber board. Besides an office suite for the superintendent of schools, the building provides offices for the board of education, the city department of recreation, an auditorium and eleven offices for supervisors, bringing all administrative and supervisory offices, maintenance shops and storage rooms under one roof.

The superintendent's office.



The administration building, Sioux City, Iowa.

A representative supervisor's office.

The session room of the board of education.

BETTER PLANT PRACTICES

Petty Cash

"Without proper control, the item of petty cash in a school system can be greatly abused."

We are quoting H. L. Chamberlin, business manager of the public schools of Lansing, Mich. Practically the same sentiment is expressed by numerous other school officials. In fact, the problem seems to be so general that we proceeded to check for information as to what is being done about it in different sections of the country. What constitutes "proper control"?

Lansing Plan

In terms of Lansing's operations, "proper control" means handling all petty cash through the cashier at the school administration building.

"The cashier is bonded and controls a fund to the amount of $5000," he says. "All employes who are not on the regular pay roll are paid from this fund as well as all petty cash items, such as express charges, postage, freight, bus fares and other small items.

"School principals and department heads are furnished with order blanks which have to be filled in, dated and signed. These orders cover miscellaneous items. Upon receipt of the order the cashier renders a petty cash check in favor of the payee.

Office of Board of Education
Lansing, Mich.

Please draw a Petty Cash check to the amount of $..... for stamps, stamped envelopes or cards to be charged to principal's office supplies.

..... School
..... Principal

Date .....

"Labor checks are issued in the same manner to employes not on the regular pay roll. Time books kept by foremen are checked and verified by the supervisor of maintenance before payment.

"The Lansing board of education meets on the second and fourth Monday of each month when claims are presented and passed for payment. All petty cash accounts which have been paid are listed under one voucher and the treasurer of the board then issues a check in favor of the cashier of petty cash for the amount of the voucher. By this method, the petty cash account is not depleted. The orders, express receipts, freight bills and pay rolls become part of the voucher record."

$50 the Limit

In Lorain, Ohio, the board of education of the Lorain city school district permits the use of only $50 in petty cash. For the benefit of other districts, in which a similar rule is enforced, we shall ask Charles A. Hartz for details.

"Our method of handling," he says, "is for the payment of freight and express charges and other small accounts that cannot readily be handled by the issuance of a warrant. Freight and express bills are kept on file until such time as the petty cash becomes low enough for the issuance of another warrant in favor of petty cash. At this time, these payments are distributed to the various accounts and presented to the board for its approval and authorization of a warrant. By this method, petty cash is kept in balance from warrant to warrant as cash on hand and the total amount of bills on file should at all times equal the amount of $50."

Three Accounts Only

Petty cash is used in only three places in the school system of Hammond, Ind. This is on the authority of none other than Donald E. Gavit, business manager. We'll let Mr. Gavit speak for himself.

"First, the financial clerk has a petty cash account from which such items as express, postage and miscellaneous items of less than $1 are paid. Second, the athletic department has a petty cash account of $25 from which such items as liniment, shoe strings and other small items are purchased. Third, the home economics departments have a petty cash account ranging from $15 to $30 per school from which all vegetables, meats and foods are purchased.

"Detailed claims are required to be filed each month for the amount of expenditures during the month, at which time a check is drawn to bring the balance in the petty cash account to the amount allotted."

In Mobile

In Mobile, Ala., all obligations of Mobile County, except minor items, in most instances of $1 or less, are paid by check.

"We keep on hand a petty cash account, the maximum amount of which is $25," B. C. Rain, secretary-treasurer reports. "Small items coming to us for various expenses, principally express and railway freight, are paid from this fund. Proper charge is made on the payment of these small items. As the amount in the petty cash account is about consumed, the items are charged out and the petty cash reimbursed accordingly."

Fall Planting

Because fall is believed by many to be the best time to sow grass seed, there are many things to think about if the school grounds are to look as they should. Sometimes borders or small patches represent a greater problem than larger areas, because they may be washed out more easily.

The answer is simple, provided there is some burlap around the school plant. There is nothing better to put over seed beds after sowing to prevent washing and to start germination, according to one who has experimented with success. Like everything else, however, it must be used with some discrimination. If it is left on after the grass comes through, mildew may start, for the reason that it cuts out too much air. If heavy rain threatens, put the burlap back again and remove it after the rain is over or danger has passed. The young grass will come out in patches, if the burlap is allowed to stay on too long. After the grass gets up 1½ or 2 inches, there is little possibility of any wash.

To Forestall Slips

With icy weather not far distant, it is none too early to give some thought to the protection of slippery steps. Cinders, salt or sand do the trick effectively, but they go too far, carrying their traces into foyers and hallways. Looking back into the notebook of last winter's school excursions reveals an interesting experiment with sawdust or sweeping compound. If warmed and dried it will be equally as efficacious as more familiar remedies and will do no damage within the building.

In the Mood for Music

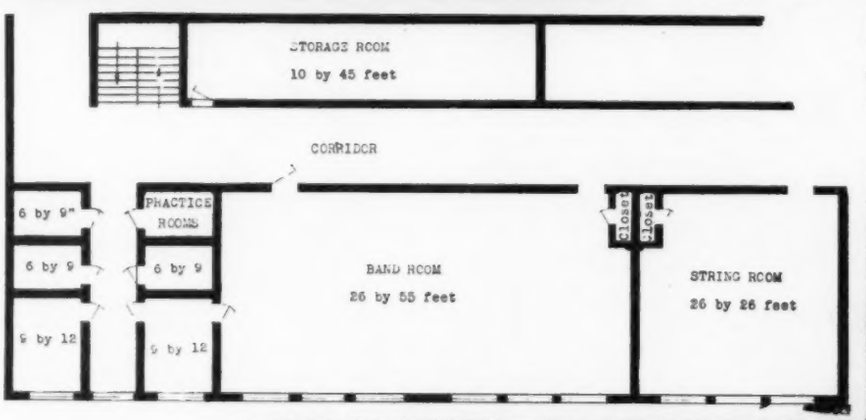
P. J. MYRAN

Size doesn't count. It's what you manage to put into it. Blow, boy, blow!

THE new instrumental music quarters at Michigan City High School, Michigan City, Ind., are a bandmaster's utopia of beauty combined with practicability. They consist of nine rooms with three types of acoustical treatment, a modern ventilating and heating system, and eighteen 200 watt lights that make the large rehearsal room an ideal workshop.

One room, 26 by 53 feet, is adequate for either of the major organizations; the string room, 26 by 26 feet, is used for the orchestra strings and some of the smaller junior organizations. In addition to these, there are six individual and ensemble practice rooms and a storeroom which houses 167 school owned instruments and the band and orchestra library.

These rooms are doubly appreciated, because for eight and one-half



Today 75 per cent more work is done because of modern facilities. Nine rooms comprise the new instrumental music quarters. The rehearsal room is shown at right.

years all the work was done in a small basement room, 26 by 28 feet, in which were also the library and instrument cabinets. This was formerly the coal bin for the Junior High School heating plant. It was without ventilation and usually overheated in winter because of the uncovered steam pipes running across the room near the ceiling. Frequently it was necessary to practice and coach pupils with the temperature 100° F.

The noise of boys running down the hallway to gymnasium classes and of girls lending enthusiastic vocal accompaniment to a game of

A soundproofed practice room.

volleyball across the hall added to the difficulties. Windows in the thin partition were, of course, broken out. The only place for solo and ensemble practice was in the hallway between the band room and the gymnasium.

Individual and ensemble practice immediately went to a new high, once the new soundproofed quarters became a reality. Fifteen out of 19 soloists were placed in the first division in a recent district contest. At least 75 per cent more work is being done and with far less nervous and physical fatigue.

The increased efficiency of the department, resulting from better acoustics, fresh air, proper lighting, practice rooms and plenty of storage space, has made the taxpayers' expenditure more than worth while.

Self-Inspection Blank for Milwaukee Public Schools

(*Continued from page* 46)

	Yes	No.
19. Are all such hazardous materials kept in special fireproof room?		
In what quantity?		
20. Are raffia, cane, upholstery padding or similar materials kept in tight metal containers?		
21. Are classroom cabinets and teachers' closets free of waste paper, oiled dust cloths and other highly flammable material?		
22. Are project properties constructed of light wood and paper kept away from steam pipes and other sources of fire hazard?		
23. Are these project properties flameproofed?		
24. Are waste paper, refuse and rags kept in metal containers and disposed of daily?		
25. Are acids stored only in quart bottles or in special acid storeroom?		
26. Are the premises free from defective electric wiring or equipment?		
27. Are only approved extension or portable cords under 6 feet long used?		
28. Are all fuses on lighting or small appliance circuits 15 amperes or less?		
29. Are electric pressing irons and glue-pots equipped with signal light and provided with metal stand?		
30. Are sufficient fire extinguishers provided on each floor so that not more than 100 feet travel is required to reach nearest unit?		
In manual training shops, cooking rooms, on stage, 50 feet of travel?		
31. Are there two soda-acid extinguishers on high school stages?		
32. Is there at least one extinguisher on elementary school stage?		
33. Have fabric stage curtains been flameproofed within the last two years?		
34. Have chemical extinguishers been recharged within a year?		
35. Is the date of recharge shown on tag attached to extinguishers?		
36. Are boxes for hand extinguishers equipped with a tool for breaking glass?		
37. Is a large woolen blanket readily available on a hook in cooking room and cafeteria kitchen for use in case clothing is ignited?		
38. Is it folded in pleats for ease in unfolding?		
39. Are corridors free from chairs except when used by cadet or monitor?		
40. Are there at least two means of egress from each floor of building?		
41. Are these located so that the distance measured along line of travel does not exceed from door of any classroom 125 feet?		
From any point in auditorium, assembly hall or gymnasium 100 feet?		
42. Are all windows free from heavy screens or bars?		
43. Do all exit doors open outward?		
44. How many interior stairways are enclosed? ..... Are doors to these enclosures of self-closing type equipped with fusible links?		
45. Are windows within 10 feet of fire escapes glazed with wire glass?		
46. Are manual training, domestic science, other laboratories and cafeteria so located that fire in one will not cut off exit from the building?		
47. Is a smoke-tight projection booth, built of incombustible material, vented from outside, provided for motion picture machine?		
48. Are heating plant and fuel supply rooms cut off from main corridors by fire resistant walls, ceilings and doors?		
49. Are fire doors kept unobstructed and free to close upon fusing of the fusible link?		
50. Are fan rooms kept clean and free from all kinds of material?		
51. Are plenum chambers free from storage of lumber, paper, etc.?		
52. Where is main shut-off valve from gas supply?		
Is it accessible and can gas be shut off in case of fire?		
53. With all gas shut off and main gas valve open, does meter show no loss during a sixty minute test?		
If loss is shown, state the number of cubic feet		
54. Are provisions made for sounding alarm of fire from any floor?		
55. Is the sounding device plainly marked and accessible?		
Is the alarm audible in every room?		
56. How often are fire drills held? ..... Average time of exit?		
57. Where is nearest city fire alarm box? ..... How far? ..... feet		
58. Considering the construction of the building, do you feel that there is no known means of fire prevention which is not daily observed?		
59. Have you observed any hazards not covered in this inspection blank?		
60. What practices on the part of workmen now engaged in your building are contrary to good fire prevention or safety rules?		
61. Was the principal with you when inspection was made?		
If not, why not?		
62. Have you any remarks? (Use reverse side)		

Principal or his representative. Engineer-Janitor.

Referred for Reinspection to: ..... *Items* ..... *No.* ..... *Date:* .....

Reinspection Report Received ..... *by* .....
Chief of Bureau of Bldgs. & Grounds.

Report must be filed by .....

Received by Secretary.

The Custodian's Contribution

J. C. STOY

Gone are the days when all the school janitor was required to do was fire the furnace, pour kerosene on classroom floors to keep down dust and give desks a "lick and a promise" with the old feather duster

THE custodianship of public school plants is a type of work distinctly different from any similar post in the public service. The custodian who is employed in other departments of the city, county and state deals almost entirely with adults. The school custodian is entrusted with the physical welfare of a generation that is in its formative stage of health habits and character building.

If the custodianship of public schools is to become a position of respect and honor, serious thought should be given by custodians to their mental and moral growth and well-being for they influence the growth and well-being of those whom they serve, the children of their community.

A custodian who thinks only of the thousand-and-one duties he has to perform and who gives no thought to the part these duties play in the whole scheme of education soon becomes unfit to perform in a manner that contributes to the advancement of the children in his school. The work of a custodian, considered from the standpoint of a job to be done, is drudgery within itself, but when it is considered as a part of the whole scheme of education it becomes an important link in a chain that ultimately will be the means of strengthening or weakening the coming generation.

What, then, is the relationship of the school custodian to his community?

Many high sounding expressions such as, "Keepers of the Houses of Democracy," have been used in describing the school custodian, but all such definitions have come from those who have never served in that capacity. These expressions never will sell the custodian to his community unless the custodian, through his community interests, demonstrates his value in these capacities. In the final analysis the whole thing simmers down to salesmanship.

A custodian may sell himself to his community by showing a working interest in the things that his community feels are good for its development. There is always some activity in every community that appeals to each individual. It may be of a social, a religious, or a physical nature. The custodian who has found a niche in the community life where he can serve with pleasure and profit already has sold himself to his community. The matter of selling his job and everything that it stands for will subsequently be easy.

Another advantage in taking part in community affairs is the pleasure that the custodian derives through social contacts with people outside his line of work. He is able in this way to get others' viewpoints on matters in which he is interested. In turn he may express his position on certain matters.

The custodian has a definite relationship to the educational system. He is primarily responsible for the cleaning, heating, ventilating and general care of the building and grounds. This job requires study, thought and, above all, practice. It requires early rising and late retiring hours, all of which become monotonous. When "hooked up" with the whole, however, it becomes as scientific as any branch or department of the educational system.

Just to keep a certain amount of steam pressure on the gauge, when a heating boiler is fired or when an electric motor or steam engine causes a fan to revolve, is drudgery. But when that boiler is fired or that fan is started revolving with the thought in mind that through these operations the custodian is contributing to the health and comfort of the children, then it ceases to be drudgery and becomes a pleasant vocation.

When the custodian sweeps and dusts a classroom or mops and cleans a toilet just to get the job done, then truly he is doing menial labor. When he connects with these duties the thought that, in addition to giving the children a healthful and clean environment in which to grow and develop, he is setting them an example of cleanliness and orderliness that will be invaluable to them in their lives, then he is contributing something of value to the educational system.

Some custodians consider old fruit crates and other pieces of discarded materials that are brought in to the classrooms to be sawed and fashioned into chairs, tables and other articles simply as junk. The visionary custodian, on the other hand, realizes that these are the tools of modern elementary education and that they are part of the process of learning by doing. He should acquaint himself with educational advances so that he will not be in danger of reverting to the old type of school janitor, too old to do anything else, who holds his job either through political pull or because of charitable impulse.

A modern, wide awake custodian keeps informed about educational projects through frequent conversations with his principal and teachers. He learns about the different projects that are being conducted in the classrooms and contributes by lending every assistance to each new project.

Even though it is the duty of the principal and teachers to direct the health and safety of their pupils, the custodian should be just as interested and diligent in these matters. He must be alert in aiding accident pre-

(*Continued on page* 52)

Those Window Shades!

WILLIAM P. UHLER Jr.

HEALTH education, one of the later educational developments, is rapidly achieving, in actual practice, the place that for a decade or more it has held on paper. Although health may be first on a list of educational objectives, the pressures for academic accomplishment are still so strong that practice lags behind theoretical knowledge and ideals. An important element in the hygiene of instruction is the window shade.

Window shades are used only to exclude glare. The first consideration is the type of shade to install.

A shade that gives complete satisfaction is hung upon two rollers placed at the center of the window, one shade pulling upward and the other downward. The most modern type of fixture provides a metal strip to block out light from the space between the two rollers. Lacking this fixture, the upper shade should pull downward and the lower one upward, crossing at the center and preventing light from entering at that point.

The shade should be of a translucent material of light buff or green. If it is of opaque material, too much light is excluded.

The shade should be wide enough completely to cover the glass area and several inches of the window frame in addition. It is not only annoying, but it defeats the purpose for which shades are installed to have a streak of light show at the side of the shade.

With the single shade suspended from the top of the window it is impossible properly to control the light. If direct light causing glare is excluded, too great a proportion of the window is covered and the room becomes too dark.

In old buildings where the single top-hung shade has been installed, conditions can be improved by lowering the fixture about 10 inches from the top of the window. This allows the entrance of light at the top. To lose this light is to lose the best part of the lighting possibilities: that light which is reflected from the ceiling.

If there is any one element in classroom management that is neglected more than others it is the control of the shades. Even when installations are the best that can be had, all too often the shades are not properly used. Children are allowed to sit with strong light shining on the tops of their desks causing a harmful glare, the shades may remain drawn long after the need has passed. Teachers at times become absorbed in class procedure and forget about the shades. The nerves of the eyes make no allowance for human failings and in a situation involving glare become strained regardless of the cause.

If the teacher would face the fact that she can do her best work if relieved of unnecessary details, she will see the value of appointing a pupil to care for the shade adjustment. True, she is still responsible and must provide supervision, but with this method she can be relieved of much of the effort. A pupil who has been given proper training in how to manage the shades and who is made to feel that he is responsible for an important health element of the classroom usually will give satisfactory service. Pupils respond to a situation of this kind and like to feel that they have something important to do. If the pupil becomes lax, his attention can be quickly brought to present needs by any pupil who feels that the shades require attention.

Boards of education have been known to make a ruling that, for appearance sake, the shades must be kept at a prescribed level. Obviously this prevents correct light control. The control should be left in the hands of the classroom teacher, who should be encouraged to give the problem adequate attention.

The Custodian's Contribution

(*Continued from page* 51)

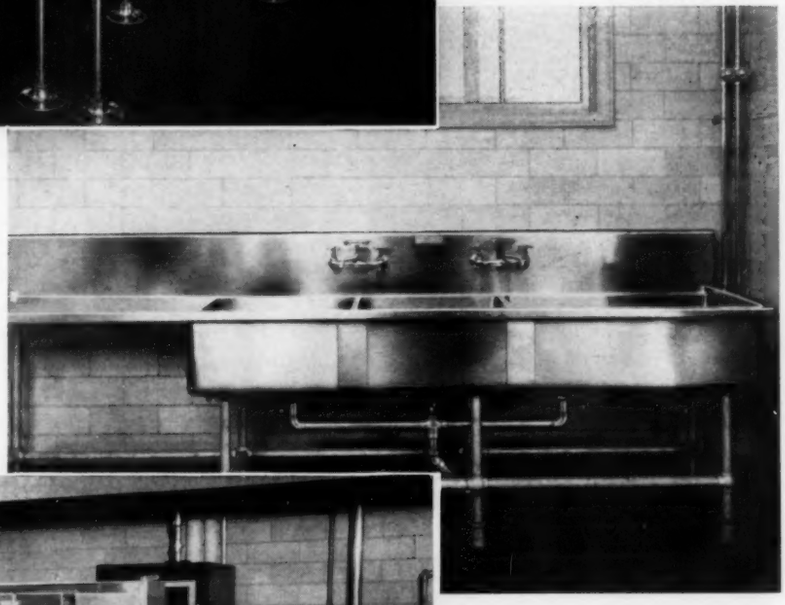
vention by removing all possible causes. Continuous washing of door knobs or the cleaning of toilet fixtures and seats with a good sterilizing solution may well have prevented numerous illnesses and possibly deaths. Constant watchfulness of fire hazards, such as accumulation of rubbish in isolated places, under stairways and in closets and attics, and oil waste and rags carelessly left about, probably is responsible for saving many lives. If the custodian has caught the spirit of his job, he will make such duties a part of his daily rounds.

Often a custodian is the only man the children contact during their entire elementary schooling. When this is true the custodian's responsibility becomes greater. Boys, especially, look to a man for their example of conduct. A custodian, who is clean personally and morally, can exert a steadying influence over the pupils. It is, therefore, exceedingly important that the custodian deport himself in his community so that he will be an example of honesty, sobriety and cleanliness to those who are his constant associates.

The custodian is a member of the community that he serves. He owes it to himself as well as the community to become a part of its civic life. It is his privilege and duty to guard the health and safety of those under his care and to fit his work into the educational setup in such a manner that the greatest good will come to those for whom his school is maintained — the children.

Rochester Does It Right

Modern cafeteria equipment means new efficiencies in the conduct of the school lunchroom. In the West High School in Rochester, N. Y., the cafeteria gleams with stainless metal and chromium equipment. Everything is ready for the line to form. To the left is the counter for hot dishes. At the right are a milk tray and rack for sandwiches.



What could be more alluring to the eyes of the cafeteria manager than this stainless metal sink for the preparation of vegetables! Note its relative shallowness to prevent crushing of salad greens and vegetables by filling the sink too full. It is set high enough to permit the worker to stand upright while carrying on the rinsing process. Rounded corners, of course, and firmly welded in one piece.

Almost any baker would be inspired by the table provided for his own special use. The small bins above are for seasonings and small items. Below plenty of space is available for those ingredients that go to make up the delicious looking cake, cookies and hot breads that presently will appear attractively lined up on the counter.

American children in the six schools represented in the charts below receive at their school lunch alone a better balanced diet than English school boys of the early 18th century were provided in an entire day.

Building Health Through Food

FRANCES LIVINGSTON HOAG

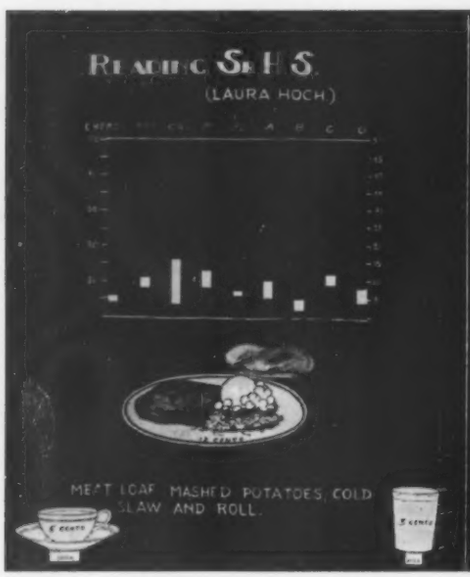
WHEN we consider the food intake of man a few centuries back we are not surprised at his low vitality and short life span. But, important as food was to his very existence, man as a recorder of history, poet or writer, never took much trouble to leave a quantitative record of what he ate.

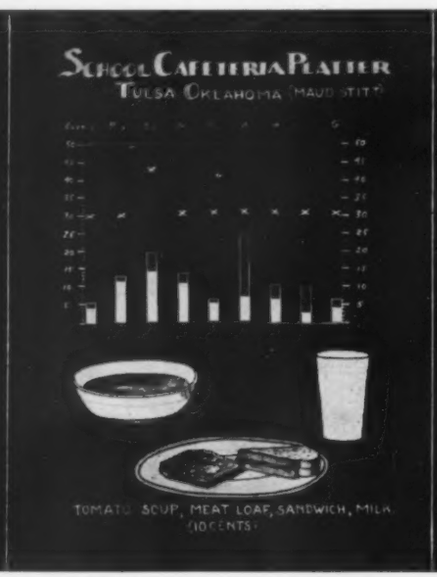
Though the famous Blue Coat School, or Christ's Hospital of London, was founded in 1552 the quantity of food the boys consumed is not given for some 150 years later. We read hastily that they had "8 oz. Pudding Pyes for Supper," an occasional holiday treat of "ffirmity" (hulled wheat boiled in milk) and ate "Pease potage every ffriday in their dyett."

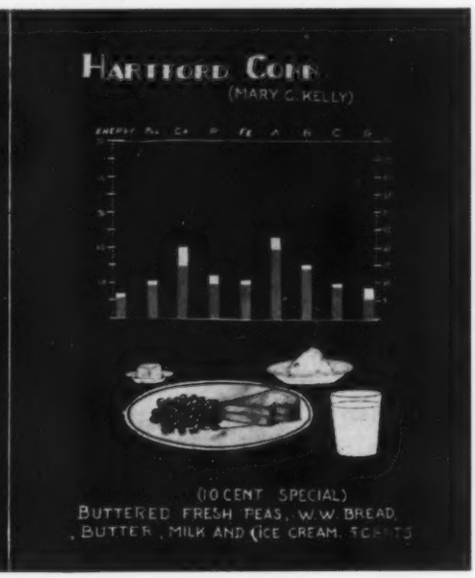
But for the week of Aug. 14, 1704, some inspired bookkeeper carefully recorded the weekly food intake. From that weekly record the average daily intake for each boy was made and is given in graphic form.

The deficiencies in the diet of these teen age English boys of the early 18th century in energy, protein, mineral and vitamin values are amazing. No longer do we wonder why scurvy was prevalent and so often fatal! The blank where vitamin C should score tells the nutrition story as an x-ray would reveal construction defects. The echoes of those hungry boys are real indeed as they filter down to us over two hundred years. The penniless boys could not supplement their meager intake from the Tuck Shop selling gingerbread and occasional apples.

Charles Lamb, who attended this school for seven years later in the century, gives little evidence of any improvement in the diet. He reports on "Wednesday's mess of millett" and describes his breakfast as only dry bread and beer tasting of the leathern jack from which it came. "Mylke and Butyer" were too luxurious and a quart of beer, contributing little







else but calories to his diet, is strangely in contrast to the standards for boys and girls today of a quart of milk daily. The stars in each column of the graph indicate the goals or requirements that the diet should have supplied in each food element.

Somewhere in 1838 a controversy arose over the value of potatoes in the diet of the Blue Coat School. One pound a week was included but someone in authority wanted to increase this amount to *two* pounds. The point was carried! The man with vision won! But the weight of that opposition against him is still echoing in English comment even today: "Just another starchy vegetable!" Not a word of appreciation for the doubled intake of vitamin C for which the lowly potato was and has been almost solely responsible.

Today trained dietitians in certain schools are feeding American children a better school lunch than the poor Blue Coats consumed in an entire day, higher, at least, in all the most important factors. But many American children are not getting enough to eat; calories, yes—with too much consumption of sugar; minerals, no; vitamins, no! The educational work in nutrition must go on and on before they do.

For purposes of comparison only, the stars on a few cafeteria platters were placed to indicate the same goals or requirements as for the 13 or 14 year old boys in the old English school. Younger children in the elementary school will not need so high a goal in many instances, especially in calories. The calcium for all growing children, however, is 43 shares!

These carefully selected cafeteria platters reflect the skillful guiding of the trained dietitian. Wisely she provides food that meets the needs of America's great school population. Active growing boys and girls need food high in calcium and high in vitamins. Skillfully she combines her foods for platter specials, not only for economy but for the educational purpose of training children in food habits and in selections.

Gently she guides the children to select milk as the foundation for any good diet and to value it for its real food value and unique contribution in calcium. She helps the high school pupils appreciate plain milk for its relatively low calories of 170 per glass and to consider well before substituting the 335 calories, lowered mineral and vitamin content of chocolate drinks. She persuades them to select fruits, to eat salads and to choose simple wholesome desserts, rather than pastries and candy.

Ice Cream for Small Plants

Reviewed by SELMA STREIT

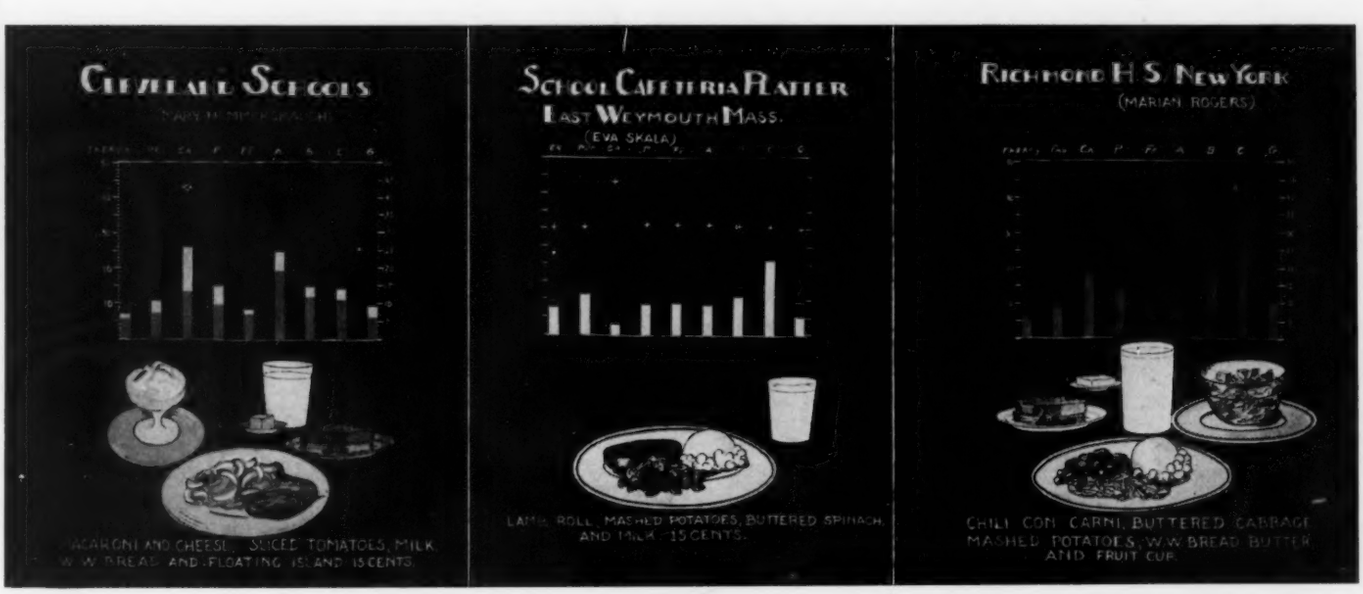
In "Ice Cream for Small Plants" Etta H. Handy has written an adequate and lively account of her subject.* Her handbook is filled with practical information and suggestions, evidently tested out by experience, for making high quality ice creams and ices advantageously and economically in small institutions.

Although there are several chapters used to discuss the composition and function of raw materials in the commercial mix and the processing and properties of this mix, the author assumes that this commercial mix is easily available and is convenient to purchase. Using this commercial mix for a base, she shows how economically the finished frozen product may be produced as compared with the purchase of it.

A number of chapters are devoted to delicious formulas for ice creams, ices, parfaits and other frozen desserts. To arouse interest in these formulas, the book has many beautiful illustrations of the finished products.

Not only does Miss Handy consider the mix and the formulas for manufacturing high grade home frozen products but she also discusses thoroughly the equipment and layout of the plants and the technic of preparation and handling. —SELMA STREIT, business director, Scottish Rite Dormitory, Austin, Tex.

*Ice Cream for Small Plants. By Etta H. Handy. Chicago: The Hotel Monthly Press, 1937. Pp. 178.


CLEVELAND SCHOOLS
SCHOOL CAFETERIA PLATTER
EAST WEYMOUTH MASS.
(EVA SKALA)
RICHMOND H.S. NEW YORK
(MARIAN ROGERS)
MACARONI AND CHEESE, SLICED TOMATOES, MILK
W.W. BREAD AND FLOATING ISLAND 15 CENTS
LAMB ROLL, MASHED POTATOES, BUTTERED SPINACH
AND MILK 15 CENTS.
CHILI CON CARNI, BUTTERED CABBAGE
MASHED POTATOES, W.W. BREAD BUTTER
AND FRUIT CUP

Cooking in Quantity

BLANCHE M. TANSIL

Large quantity cookery students slice a fowl to determine yield.

Students preparing to serve a meal in the college cafeteria.

"THIS is good to have been cooked in a large quantity" is a comment frequently made in praising institutional food, implying that large quantity connotes lowered quality. Untrained managers offer this large quantity bogey as an excuse for poorly balanced menus and for flavorless and unattractive food. Trained managers know that the preparation of food for institutions calls for specific knowledge and training.

Too many food managers are inadequately prepared to plan, direct and supervise the food for large groups. Colleges and universities today are seeing that their graduates in institution management are adequately prepared for the jobs they enter. They are also rapidly providing apprenticeship training or centers for additional experience before placing their students in jobs. A course in large quantity cookery is required of all institution management majors.

What are students taught in a course in large quantity cookery and what do they learn in this course that will prepare them for their jobs as dietitians? These questions will best be answered by some extracts from the daily laboratory reports of a class I taught last year. Most of the students were food managers who had returned to college to learn more about their jobs.

A student wrote: "I had never heard of a time study being made in a kitchen until today. When I prepared the salads in the cafeteria another student sat near me and recorded the time I spent in making them. It took me an average of two and a half minutes to make up one of the salads. I calculated that it would have taken a worker eight hours to have made 200 salads. There is no wonder that salads in some cafeterias look so carelessly put together! This timekeeper also kept a record of my motions. She said that I could have made this salad in less than half the time if I had organized my work." Is it not the job of the manager to be able to organize the work of the employes for efficiency and better food production?

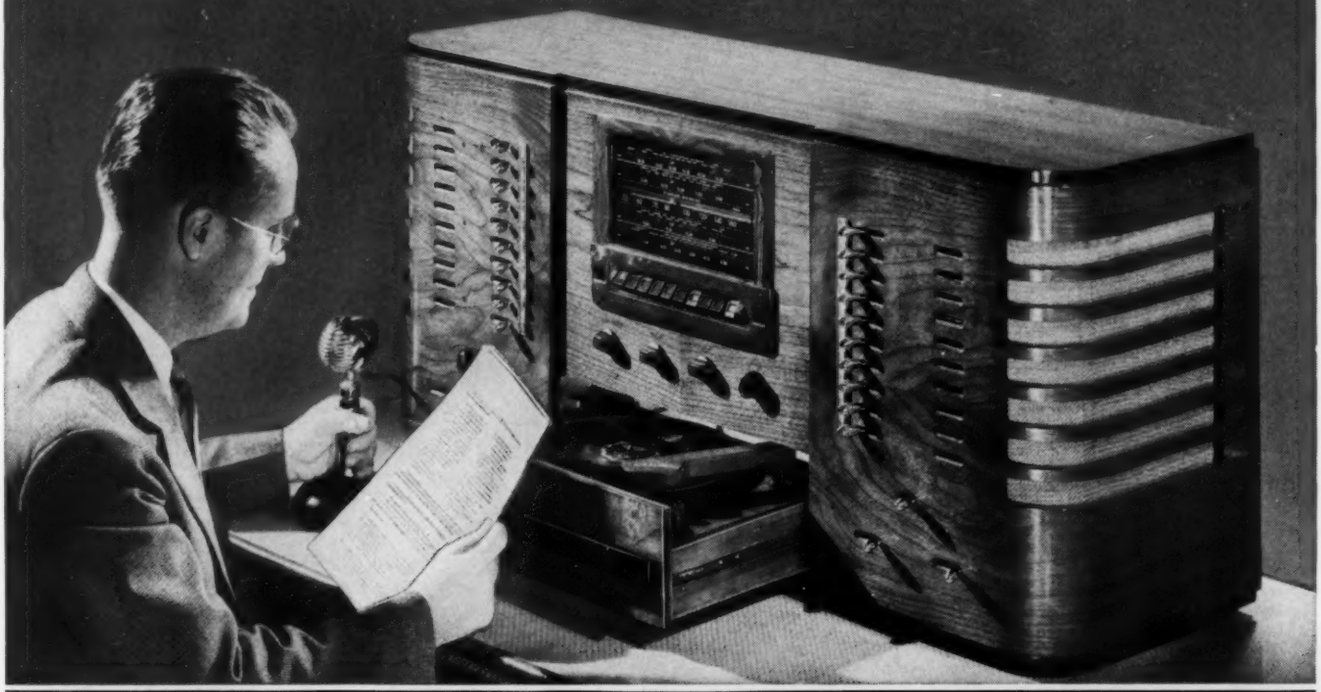
Another student reported, "When I made the salads today I picked up the pieces of fruit and vegetables with my fingers until it was called to my attention that there were—right before me—stainless metal tongs, ladles and spoons to use. I had never provided these tools for my employes and I had not considered before how habits of cleanliness contribute to good food production."

From the meat preparation unit came this comment: "Imagine my sinking feeling when I was assigned the cutting of the steaks for a special dinner in the cafeteria. With me, steak cutting had always been the job of the butcher. I had never taken the time to determine the yield, the size of the servings and the cost and waste in cutting steaks. We were instructed to cut 4 ounce steaks from beef tenderloins. There was to be no guesswork about it, for we had scales to use. After they were uniformly cut and neatly placed in a pan with waxed paper between each layer, I realized that I could give my butcher and cook new joy in their work by setting new standards. I also saw the need for supervision and for utilizing the trimmings from the meat."

Another comment from this unit: "The dressed fowls that we prepared weighed a little more than 4 pounds each. To my surprise they lost 75 per cent in weight in drawing, cooking and in separating the meat from the bones and skin. There was an average yield of only 1 pound of meat from each fowl."

After a vegetable preparation lesson came this comment: "We shelled one bushel of green peas, keeping a record of the time, the yield, the waste and the cost. We cooked them in a steam jacketed kettle and compared them to the canned and frozen peas that were also ready to serve. We noted the color and flavor of each. I learned how to make decisions in purchasing the fresh, the canned and the frozen vegetables by comparing the cost of servings, the labor and the time involved in pre-

RCA Victor Introduces New Amazingly Low Priced School Sound System!



NOW *Every* SCHOOL CAN OWN MODERN SOUND EQUIPMENT!

Designed for small schools—both in size and price... this new unit offers features that distinguish much more costly instruments

Today a centralized sound system is almost a necessity in schools. Its administrative uses, alone, are of untold value to the busy principal.

But the greatest benefits are to the pupils—through enrichment of the curriculum. At the touch of the hand, the finest educational radio programs may be put in any or all classrooms. And by merely pulling out the drawer which contains the modern RCA Victrola, you make available the world's finest recorded music, drama and speech.

Think of the many uses of this RCA Victor Sound System in your school and of the amazingly low cost at which all may be obtained. Then fill out the coupon for more detailed information, price quotations and a demonstration.

ALL THESE VALUABLE FEATURES!

Designed for schools up to 20 classrooms. Easily adapted to schools up to 40 classrooms, plus sound amplification for the school auditorium.

Has 12-tube High Fidelity RCA Victor Electric and Manual Tuning Radio and built-in Victrola with crystal pickup, housed in a beautiful walnut cabinet—only 42″ long, 18¾″ high and 14¾″ deep. Has complete two-way communication system. Speech, music, radio and recorded programs may be sent to any room or group of rooms, or to all rooms simultaneously.

Educational Department, (N-10)
RCA Manufacturing Company, Inc.,
Camden, New Jersey.

Please send detailed information and price quotations on an RCA Victor School Sound System for _____ rooms.

Name _____

School _____

Address _____

Do you desire a demonstration (no obligation)? _____

RCA Victor SOUND SERVICE FOR SCHOOLS

Educational Dept., RCA Manufacturing Co., Inc., Camden, N. J. • A Service of the Radio Corporation of America

Modern schools *stay* modern with RCA tubes in their sound equipment

RCA presents "Magic Key" Sundays, 2 to 3 P. M., E. S. T., on NBC Blue Network

Students making a time and yield study on a bushel of green peas.

paring them, and the quality of the cooked product."

Also from this unit: "We studied the color changes in vegetables after they were cooked by different methods and after they were held on the cafeteria counter for an hour. The preservation of the nutrients in cooking fruits and vegetables was also considered extremely important. By careful cooking it was possible to keep both the nutrients and the color in most vegetables."

While working in the bread unit, one student wrote as follows: "I made 250 wholewheat biscuits today, using the electric mixer. The mechanical dough arm is superior to the human arm in mixing. It makes for a more standard product and relieves the cook of heavy work. I saw that there was no longer need to accept excuses from the cook for poor biscuits. Standard methods and standard recipes do the trick!"

Another wrote: "We took plain dough and made it into orange rolls, coffee cake and a dozen other varieties of raised rolls. I saw that monotony in my menus had been due to my own stupidity in failing to plan variety in the breads."

The comments from this class would make a sizeable book, for each student was expected to write comments after each lesson, as well as to record her results. But these few extracts serve to illustrate how the "large quantity" problem disappeared as these students progressed in the course. The laboratory work promoted confidence in their ability to handle their jobs more efficiently.

The untrained manager asks what she can do with "left-overs." The trained manager answers that food would not accumulate and become a "left-over" problem if she planned wisely. Planning w i s e l y means knowing the size of servings, the amount to buy and to prepare for a given number of people. It means outlining in advance the use of food that might remain after the meal, as an ingredient of a dish for a succeeding meal.

Dietitians are expected to have and to make use of this fundamental knowledge and, in addition, to be able to plan appetizing food combinations, to maintain high standards in food preparation and to direct employes in clean and careful habits of work.

More emphasis needs to be placed on the requirement of a course in large quantity cookery and the mastery of a subject that plays as large a part in the lives and health of people as does good food.

FOOD FOR THOUGHT

Statewide Program

• A committee for the improvement of school lunches, headed by Ruth Freegard, Michigan state supervisor of home economics, will release suggestions for improving school lunches through the Michigan Public Health Department, the Michigan Congress of Parents and Teachers and through newspapers.

Mimeographed bulletins on "Good Practices for School Lunches," "Ways of Organizing School Lunches," and "Health Teaching Through School Lunches" are to be available.

Other members of the committee are: Dr. Lillian R. Smith, Elizabeth W h i p p l e and Alice Montgomery, Michigan Department of Health; Alice Evans, Michigan Children's Fund; Mable P. Eilers, Merele Byers, Beatrice Boyle and Robert Hershey, Michigan State College; Jesse Walton, Kalamazoo, and Margie Thompson, Lansing.

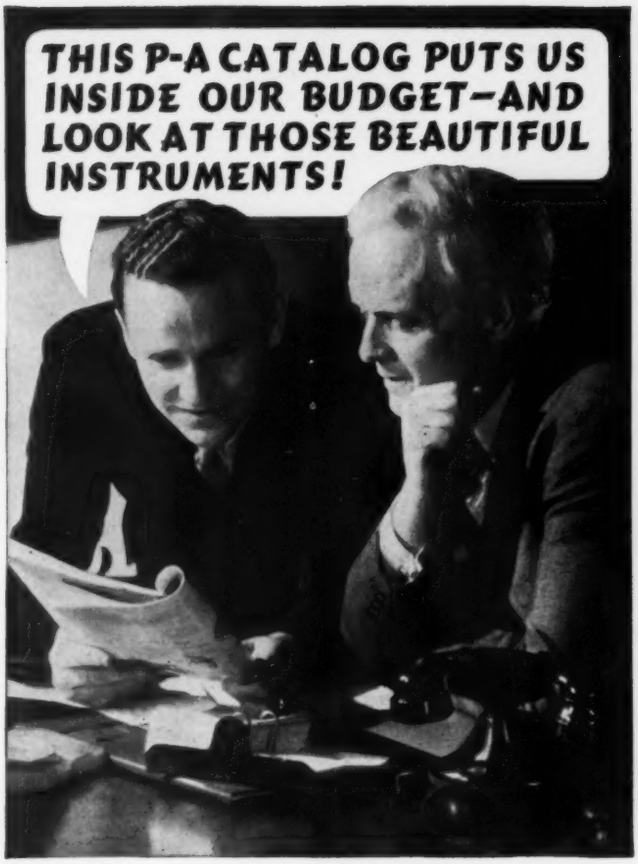
Broken Dishes

• Loss in dish breakage is carefully estimated at the Hutchinson Commons, University of Chicago, although employes are not charged for the dishes that are broken. The loss in breakage is estimated by having all broken dishes placed in one container beneath the table at which dishes are scraped before going to the dishwasher. They are then counted and the loss estimated and posted on a bulletin board above the employes' time clock.

Student Diet Clinic

• A diet clinic has been in operation at the University of Michigan since December 1933 and during that period has given personal dietary service to 1982 students. Each student applying for diet instruction is under the personal observation of a physician. Statistics show that in eight cases reporting for recheck, an average gain or loss of 6 pounds was demonstrated.

As examples of what was accomplished among students who took their eating habits seriously, a young man of 21 years, 6 feet 2 inches tall, came into the clinic weighing 146 pounds. After following instructions he returned at the end of five months, weighing 167 pounds. Another young man, also 21 years old and 6 feet tall, weighed 218 pounds. He was put on a 1500 calorie diet and at the end of three months lost 37 pounds.



GET THIS P-A *Budget Balancing Guide Book*

● Definitely, the moderate price range of Pan-American band instruments is the short cut to a balanced budget. Hundreds of now fine school bands have been fully P-A instrumented on appropriations that at first seemed disastrously inadequate. *But don't* buy P-A's just *on price.* Choose them because they are the very best for the young student, assuring him rapid progress, quick mastery, sound musical education.

World's Biggest Dollar-Value

In fine tone quality, prime requisite of *any* musical instrument, P-A's are of highest artistic standard, and in material refinements, they equal or excel many selling at top prices "Slik-Valves" on P-A cornets and trumpets will not corrode, stick, discolor; "Slik-Slides" on P-A trombones will not pit nor corrode; fast, smooth action; smart styling, beautiful finishes, handsome cases, bring student respect, encourage practice, insure proper care. No other instrument offers so much, at so little cost. School executives, music directors, see your local music dealer or write for the big new P-A catalog which will solve *all* your band instrument problems. Write today, sure. 1340

It is not a genuine Pan-American unless the Pan-American name is engraved on the instrument.

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BAND INSTRUMENT AND CASE CO.
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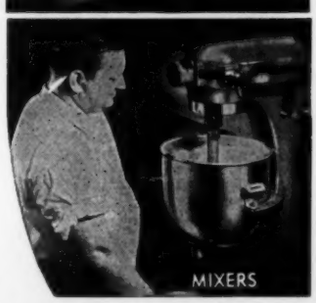

Waste of money and time in obsolete dishwashing methods can be STOPPED NOW in ANY kitchen! Here's FULL SIZE dishwashing and rinsing capacity — in a compact Hobart Dishwasher at a price ANY KITCHEN CAN AFFORD! It has all the ruggedness of larger Hobart Models, and takes full size racks. If you are washing dishes by hand, or with an old, half-worn-out dishwasher—if you have held back from adopting modern mechanical equipment because of price or lack of space—get the full details about this new "LM" now.

Have you seen our new folder, "SOS"? It contains an important story of savings—definite, provable savings for kitchen operators, in the use of Hobart Dishwashers, Potato Peelers, Mixers, Slicers and Food Cutters. If you are interested in lower costs of serving meals, be sure to get this timely information.

The Hobart Mfg. Co.
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HOBART ELECTRIC KITCHEN *Machines*

Please be sure to mail me copy of "S O S" free. Especially interested in

☐ Kitchen Slicers ☐ Dishwashers ☐ Mixers
☐ Potato Peelers ☐ Food Cutters ☐ Air Whips

Name_____

Address_____

Two "electric eyes," mounted above the blackboard in the "key" room, control the lights in twelve rooms in which lighting conditions are identical. One of these controls the lighting fixtures farther from the windows; the other, those placed nearer the windows.

New Lights for Old

THE original lighting system with its wiring, installed in 1924 when the Sumner Grade School, Sumner, Wash., was first built, was found to be inadequate whereupon school officials appointed Mock & Morrison, architects of Tacoma, and R. E. Towne, electrical engineer, to improve this condition.

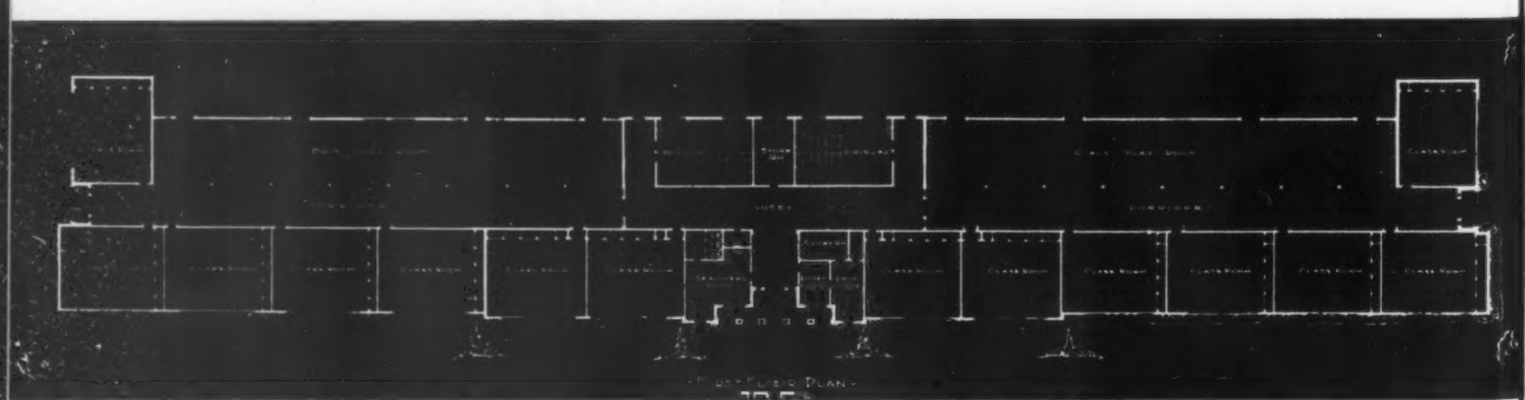
After a careful study of the situation the lighting not only has been made correct and adequate but has been placed in the same category as modern heating, in that it is completely automatic. Without any attention whatever, the level of illumination in all parts of the rooms never decreases below a value conducive to eye health. Likewise, it is not allowed to rise unnecessarily high, as probably would be the case if the lights had to be turned off when not needed.

This is accomplished by means of two photo-electric cell relays, or "electric eyes" mounted above the blackboard in one of the classrooms, selected as the "key" room. One of these has the power of "seeing" the light intensity on the desks in that part of the room farthest from the windows and of controlling the lighting fixtures farthest from the windows. The other relay performs this function for the fixtures nearest the windows. Thus the illumination in each half of the room is automatically regulated separately.

It is generally recognized by eye specialists and lighting experts that for classroom work the light intensity should be between the levels of 10 and 30 foot candles. Lower values produce eyestrain; higher values are not considered economically necessary. In this school when the light intensity in either half of the room falls to 11 foot candles, the artificial lights in that part of the room come on, adding 18 foot candles and making a total of 29. When daylight causes the intensity to reach 35 foot candles, the lights are turned off, leaving 17 foot candles for study purposes.

In a classroom with no artificial lights turned on, the intensity on a bright day will vary from 100 foot candles near the windows to about 8 foot candles near the inside wall. On a dark day these values vary from about 17 foot candles to 1 foot candle, respectively. This shows the importance of controlling the lights separately in each half of the room.

Since 12 of the 14 classrooms in this school face east, lighting conditions are identical in these 12 rooms.



PROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

Mercurochrome, H.W.&D.
(Dibrom-oxymercuri-fluorescein-sodium)

is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)
MERCUROCHROME, H. W. & D.
(*Dibrom-ozymercuri-fluorescein-sodium*)

A NEW TREND IN INDUSTRY

Significant for Vocational Training

Light motor-driven tools have penetrated industry to a remarkable extent. In thousands of machine shops, woodworking plants, pattern shops, maintenance departments, shipping rooms—low-cost tools similar to those in the photograph have been adapted as standard equipment.

This new development is of vital importance to those concerned with vocational training. It means that in addition to the obvious advantages of light power tools, with their low first cost, low operating cost, greater adaptability and flexibility, there is now the great advantage of training students on tools they will actually use in industry.

Delta light power tools are being adopted by schools all over the country. Before deciding on equipment for your wood and metal working shops, get the full story of the Delta modern motor-driven tools. Write today for the new 1939 Delta Catalog.

DELTA Mfg. Co.
686 E. Vienna Ave.
MILWAUKEE, WIS.

For this reason it was possible to use only two "electric eyes" located in the "key" room to control the inner and outer rows of lights in the 12 rooms, thus enabling a substantial saving to be made on equipment. The lights in any room may be turned off at will by operating the conventional wall switches. The two remaining classrooms facing north and south have manually controlled lights, according to modern practice.

Not only is the lighting automatically controlled but the quality of illumination is correct in accordance with the latest practice.

Three main factors contribute to eyestrain and consequent troubles. They were controlled as follows:

1. Low intensity was overcome by installing adequate wattage. Also the automatic feature ensures the light being used when needed. In some schools sight-saving classes are provided for children having defective vision, in which the level of illumination is maintained at 50 foot candles.

2. Glare was eliminated by the use of totally indirect fixtures in which all the light is directed to the ceiling, from which it is evenly diffused throughout the room. Thus, no bright light sources are visible and a glareless, shadowless light is produced.

3. Looking alternately at brightly and dimly lighted objects, such as a brightly illuminated page and a dimly lighted blackboard, causes the pupil of the eye continually to expand and contract and results in muscular fatigue. The high diffusion from the indirect lighting fixture causes all objects in the room to be adequately lighted, thereby eliminating another condition causing eyestrain.

Transportation Costs in Iowa

WHILE there are still eleven horse drawn vehicles transporting Iowa school children to and from school, the median annual cost per pupil for transportation in horse drawn routes exceeds that on motor routes.

A report by R. C. Williams, director of research, Iowa State Department of Public Instruction, reveals that the median annual cost per pupil for transportation is $26.70 on motor routes and $28.33 on routes that still use Old Dobbin.

This analysis of pupil transportation cost was based upon expenditures during the school year 1935-36 by 323 consolidated school districts in Iowa, representing 84 per cent of the entire number in the state which are approved by the department of public instruction.

The total amount spent by Iowa school districts for pupil transportation during the year 1935-36 was $1,533,788.39. Of the total, $1,275,178.67, or 83.1 per cent, was spent by consolidated schools. These schools transported 47,521 pupils, or 82.5 per cent of all pupils transported at public expense, and maintained 2579 bus routes for this purpose.

Slightly more than one out of every ten pupils attending the public schools of Iowa was provided transportation at the expense of the district in which he resided. Four and one-half per cent of the net operating expense of all the public schools of the state was spent for pupil transportation. However, in the case of consolidated districts, it was more of a factor because they transported 61 per cent of their enrollments and devoted one-fifth of their operating expense for this service.

The most frequent type of vehicle ownership found was that in which the district owned part of the vehicle and the operator of the route owned the remainder. Next in order of frequency were districts with operator owned vehicles and those with district owned vehicles.

Of the 312 districts that had motor transportation included in this study, only five districts adopted the plan of contracting with one individual to provide the vehicles and drivers and transport all the children in the district who were eligible for transportation at public expense.

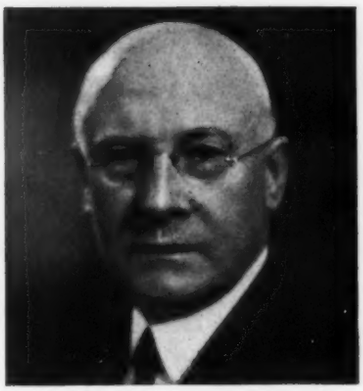
The median annual cost per pupil for motor transportation was $21.30 for those districts that owned the complete vehicles, $26.07 for districts in which the operator and school district shared in vehicle ownership, $29 for districts in which operators owned the complete vehicles, and $31 for districts that followed the plan of contracting with one individual for all transportation service.

With slight variations, the cost per pupil decreased as the average number of pupils per route increased. The median annual cost per pupil in districts that had relatively long routes was slightly less than that in districts in which routes were shorter. There was a slight tendency for pupil costs to increase with an increase in the number of routes maintained by a district.

Districts with a larger number of pupils to be transported were able to obtain transportation at a somewhat lower pupil cost than those which transported a relatively smaller number. As the per cent of total enrollment transported increased there was a trend toward lower pupil costs.

In Iowa the most frequent type of vehicle ownership is that in which the district and operator of the route own the school bus in partnership.

WHY TEACH PRINTING?



AUGUSTUS F. ROSE
Director of Industrial Arts, Providence, R. I.

"Inspiration for the young student . . .

"THE teacher of printing has a wonderful heritage as a background to draw from for inspiration for the young student. As a part of general education printing is indispensable, and in our schools it is closely related to practically all school subjects."

Mr. Rose, in whose city every Junior High School has a Graphic Arts Department, demonstrates how printing instruction contributes in generous measure to the process of general education. As a means of developing the student's appreciation for the entire field of human knowledge, teaching printing is an important adjunct of every school curriculum.

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DON'T blanket cheery windows with dreary opaque shades. Hang "Tontine" translucent shades and get the benefit of more natural daylight—minus the eye-straining glare.

"Tontine" cloth shades are tough and flexible. They won't crack, fray or pinhole. They're fast-color and washable. And they save money by lasting years longer.

"Tontine" shades are recommended by leading school boards—and are widely used in universities, public and private schools. We'll be glad to send samples or have an authorized dealer hang a shade for your inspection.

Laboratory tests of translucency reveal: "Tontine" No. 500 Snow White transmits 73% more light than a similar color in painted cloth. "Tontine" No. 508 After Glow Gray Green transmits 140% more light than a similar color in painted cloth.

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"WHITE ELEPHANTS" are often proudly paraded home merely because they seem to be "bargains." Consumer education values in ECONOMIC AND BUSINESS OPPORTUNITIES, our new high school text, will teach students to make sure that a "bargain" is a *bargain.*

"I" and "MY" are the first words in over a quarter million popular song titles—ten times as many as those beginning with "you."

APPLE PIE was the most popular dessert in 25,000,000 railway dining car meals. Making a great many healthful foods popular with boys and girls is one of the main objectives of the HEALTHY LIFE SERIES. There is interestingly illustrated content on foods throughout this modern health series for Grades 3 to 8.

ADVERTISEMENT, posted in Holland in 1656, called for a man to go to their New World colony to act as "sexton, psalm-setter and schoolmaster."

"PUBLIC OPINION in the United States is king." Such thought-provoking statements form the premises for questions in the new workbook to accompany HISTORIC CURRENTS IN CHANGING AMERICA, which is full of interest and as modern as the text itself.

IVORY, during the World War, was unobtainable from Africa, and we imported pre-historic Siberian mammoth ivory—20,000 to 150,000 years old.

GOING PLACES—visiting a dairy, a bakery or taking an airplane trip—brings new experiences and new interest to Second Grade pupils in Book Two of the EVERYDAY LIFE SERIES, by Ethel Maltby Gehres. Just off press, it is rich in social studies materials, and logically follows the stories on home relationships in the Pre-Primer, Primer, and Book One, yet the vocabulary is still simple. There are only 1.1 new words per page.

TONNAGE carried by the Sault Sainte Marie Canal, between Lakes Superior and Huron, exceeds that of the Suez and Panama Canals combined.

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NEWS IN REVIEW

Responsibility Curbs Inefficiency

Independent school boards are no safeguard against political interference in city schools in the opinion of Nelson B. Henry and Jerome G. Kerwin, University of Chicago professors, who have just summarized the results of a five year survey of public school organization in cities of more than 50,000 population.

Instead, the professors have concluded that division of authority so that political officials are forced to bear responsibility to the public is the only practical way to curb inefficiency and corruption in public school administration.

Their views are expressed in "Schools and City Government," published in September by the University of Chicago Press. Doctor Henry is associate professor of education and Doctor Kerwin is associate professor of political science. In visiting thirty-three larger cities during the investigation, they discovered little uniformity in any aspect of school administration, whether in regard to selection of school boards or in municipal relationships dealing with budgets, administration or school property.

During depression years, the economy-at-any-price groups in cities have been more successful in bringing direct pressure to bear upon the school boards than in electing candidates on economy platforms. The drive has not been, in any city investigated, so demoralizing as it has been in Chicago, the authors say.

School superintendents, they say, have battled against "the meddling of their school boards much more frequently than the school boards have resisted the encroachments of politicians."

ADMINISTRATION

Back to School

One fourth of the nation's total population — approximately 33,000,000 children, young people and adults—are attending school this fall, according to an estimate made by the U. S. Office of Education. There are about 22,400,000 children in attendance at elementary schools, 6,750,000 in high schools and 1,350,000 in colleges and universities. Several million more persons will study in evening, part-time, vocational and emergency education classes.

Two million children will enter the first grade, but it's "back to school" for many of these boys and girls, a large percentage of whom have previously attended nursery school and kindergarten classes.

Education Week Programs

Daily topics suggested by the National Education Association for American Education Week, November 6 to 12, are: Sunday, November 6, "Achieving the Golden Rule"; Monday, "Developing Strong Bodies and Able Minds"; Tuesday, "Mastering Skills and Knowledge"; Wednesday, "Attaining Values and Standards"; Thursday, "Accepting New Civic Responsibilities"; Friday, "Holding Fast to Our Ideals of Freedom," and Saturday, "Gaining Security for All." The general theme of the week is "Education for Tomorrow's America."

Student Government

The six-year-old student organization in the schools of Talihina, Okla., operates under a constitution made by the pupils themselves. It controls the work of the student council and includes every pupil, grades 9 to 12. Certain standards of scholarship and citizenship experience determine the eligibility of the officers and clauses in the constitution limit the activities of the group to those undertakings that are suited to their capacity for responsibility. Besides financing the athletic and other activities, this organization sponsors social and educational meetings.

INSTRUCTION

Education Clinic

Last October Winfield, Kan., held its first secondary education clinic, featuring Dr. Walter E. Myer, director of discussion groups for the N. E. A. department of secondary school principals. A second clinic will be held on October 7 and 8. This year it will be divided into three phases: secondary school administration, English and social science. Doctor Myer again will be the featured speaker.

Food Trade School

Upon graduation the 300 picked pupils that have entered New York's first Food Trades Vocational High School, opened last month, will have at least 800 jobs awaiting them in New York City alone, says Jacob Simonson, who will have charge of the school. Mr. Simonson spent ten years persuad-

ing the board of education to create the school, *Time* has reported.

Pupils will study the origin and science of food and the business management employed in the food industry. They will become butchers, bakers, grocers and waiters. The food industry has contributed $30,000 worth of equipment to the project.

Upon arrival at school each morning, pupils will first take a shower; then, garbed in white uniforms, they will prepare and serve luncheon.

Book Week

The twentieth anniversary of Book Week, to be celebrated from November 13 to 19, will be dedicated to children with "Accent on Youth" as its theme.

MEETINGS

Rochester Offers Hospitality

Rochester with its beautiful parks and residential gardens, the flower city of New York State, will be host to the annual conference of Food Service Directors November 3 to 5. Greetings will be extended to delegates by Lenna Cooper, former president of the American Dietetic Association; Anna Tracy, president of the American Dietetic Association; Helen Judy Bond, president, American Home Economics Association; Etta H. Handy, president, Rochester Dietetic Association; James Spinning, Rochester superintendent of schools; Manie Lynde, president, Rochester Home Economics Association, and Harold Akerly, assistant superintendent of schools, Rochester.

Second Conference

The National School Cafeteria Association will convene for its second annual conference October 19 to 21 at the Morrison Hotel in Chicago. This was the site of the association's organization meeting last year, which was attended by approximately 300 food service directors and school cafeteria managers throughout the country.

Business sessions will start on Thursday morning, October 19. Mrs. S. J. Cole, supervisor of lunchrooms, Birmingham, Ala., will respond to the address of welcome by Mayor Edward J. Kelly of Chicago. Out of town cafeteria directors who will appear on the program are: Mrs. Bena Hoskins, Fort Worth, Tex.; Josephine M. Adams, New York; Mary Farnam, Cleveland Heights, Ohio, and Dr. Cora K. Loughridge, Louisville, Ky.

Right About Face

The American Federation of Teachers, which last year appeared to be headed in the direction of a C.I.O. affiliation, this year at its annual meeting held in Cedar Point, Ohio, during August, appeared to be drifting back into the fold of the American Federation of Labor.

Mention of the referendum on C.I.O. affiliation that should have taken place during the last year apparently was ignored by the convention. Instead, the teachers empowered their executive council to open negotiations with the A.F. of L. executive council to arrange a satisfactory settlement of the problem of the special per capita fees levied by the A.F. of L., since President Green had promised the teachers that this extra per capita would be turned back to them for organization purposes. This action the teachers attributed to fear of being involved further in the conflict between the C.I.O. and the A.F. of L.

A gesture of reconciliation was incorporated in another resolution asking the two labor groups to cooperate on local and national issues designed to further labor. Jerome Davis, former Yale professor, was renamed president.

California Conference

The Southern California branch of the Progressive Education Association will hold its regional conference at the Hotel Biltmore in Los Angeles October 14 to 16. The attendance is expected to total more than 3500.

Floor Maintenance

INDORSED BY MAPLE FLOORING MANUFACTURERS ASSOCIATION

Dry cleaning dining room floor the Tennant way at Radcliffe College

TENNANT FLOOR MAINTENANCE SYSTEM

RESTORES OLD FLOORS
PRESERVES NEW FLOORS

Whether they are in the cafeteria, gymnasium, corridors or classrooms, school floors look better—last longer and COST LESS TO MAINTAIN under the TENNANT SYSTEM. Eliminates scrubbing — applies wax and polishes in one operation.

Developed expressly to meet existing school conditions the TENNANT SYSTEM is now used and enthusiastically endorsed by schools and universities throughout the country as well as by leading business concerns.

Tennant-Maintained floor in the Club House of the General Electric Company, Fort Wayne, Indiana. This floor is used DAILY for basketball, dances, ping-pong tournaments or parties. Despite this hard usage, it retains a bright, attractive appearance.

You can see the modern Tennant System demonstrated on your own floors. Write for latest literature on the Tennant System and list of users in your locality.

See the TENNANT SYSTEM fully demonstrated at the N.A.P.S.B.O. Meeting, Palmer House, Chicago, Illinois, October 10-14, 1938.

G. H. TENNANT COMPANY
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What Can You Expect
FROM A
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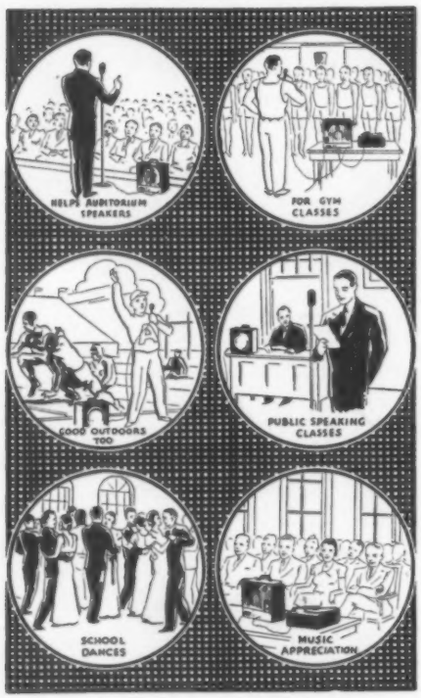
Loud Speaker—Amplifier
Phonograph



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National Association of Public School Business Officials
Twenty-Seventh Annual Convention

Chicago — October 10-14

PROGRAM

General Theme: "Modern Trends in School Business Management"

Tuesday, October 11

Morning Session

Topic: "Trends—How We Should View Them"
Presiding: RUSSELL W. HIBBERT, St. Louis
Secretary: H. W. CRAMBLET, Pittsburgh
"Trends That Affect School Business Management," by LEWIS E. PARMENTER
"Reconstruction Problems in Education," ARTHUR B. MOEHLMAN, Ann Arbor, Mich.

Afternoon Session

A. Supplies and Equipment
Presiding: JOHN T. CATE, Glendale, Calif.
Secretary: SAMUEL GAISER, Newark, N. J.
"Recent Trends in Purchasing School Supplies," WILLIAM T. SIMONS
Discussion: H. W. ANDERSON, Kalamazoo, MICH.; H. L. SUTHERLAND, Lawrence, Kan.
"Standards and Tests for Educational Material," G. ROBERT KOOPMAN
Discussion: R. E. DAUGHERTY, Louisville, Ky.; ALEXANDER M. SULLIVAN, Boston
"Supply Purchasing on a Quality-Price Basis," O. F. HASSEMER, St. Louis
Discussion: E. L. LOUNSBERY, Dayton, Ohio; JAMES F. WILLIAMS, Philadelphia

B. Building Construction
Presiding: J. C. GIBSON, Fort Smith, Ark.
Secretary: GEORGE C. TINKER, Kansas City, Mo.
"Modern Trends in School Building Construction," ALFRED C. LAMB, Detroit
Discussion: GEORGE M. CRAWFORD, San Diego, Calif.; A. G. CORBIN, Yonkers, N. Y.
"Proper Schoolroom Lighting," W. M. COUNCELL, East Cleveland
Discussion: HERBERT S. RAGLAND, Richmond, Va.; GEORGE M. WADDILL, Amarillo, Tex.
Report of research committee on school lighting by JOHN L. CARLISLE, St. Louis, chairman, with discussion by N. E. VILES, Jefferson City, Mo.
Report of research committee on school floors by C. L. WOOLRIDGE, Pittsburgh, chairman, with discussion by JOHN W. BROWN, Elizabeth, N. J.

C. School Accounting Practice
Presiding: IRA G. FLOCKEN, Pittsburgh
Secretary: HARRY E. GRIFFEN, Los Angeles
"Expenditures for Administration or General Control," C. F. BUDD, Denver
"Expenses Relating to Cost of Instruction," L. A. WILES, Detroit
"Operation and Maintenance Expenditures," WILLIAM M. SUSANKA, St. Louis
"Coordinate Activities and Fixed Charges," J. C. LUDLAM, Lincoln, Neb.
"Capital Expenditures and Debt Service," IRA G. FLOCKEN, Pittsburgh
Discussion: JOHN J. MURRAY, Wilmington, Del.; WALTER D. RILLING, Milwaukee; H. M. Hackner, St. Paul

D. Insurance
Presiding: H. C. ROBERTS, Sioux City, Iowa
Secretary: L. B. ABBEY, Port Arthur, Tex.
"Liability Insurance as a School Problem," L. D. SHUTER, Columbus, Ohio
Discussion: H. RALPH WHITEMAN, New Brunswick, N. J.; T. ROY NOBLE, Windsor, Ont.
"Automobile Insurance for the School Fleet," S. C. JOYNER, Los Angeles
Discussion: WILLIAM C. BRUCE, Milwaukee; C. A. DANFORD, Wheeling, W. Va.
"The School Business Manager Views Liability Insurance," W. N. DECKER, Altoona, Pa.
Discussion: W. F. WARREN, Durham, N. C.

Evening Session

Round Table Conferences: (a) Supplies and equipment; (b) building operation and maintenance; (c) finance; (d) smaller city problems and (e) new construction

Wednesday, October 12

Morning Session

Topics: "Trends—How They Affect School Building Problems"
Report of the research committee on playground surfacing by JOHN T. CATE, Glendale, Calif., chairman
"Criteria for Selecting School Sites," DON C. ROGERS, Chicago
"School Lighting," HANS W. SCHMIDT, Madison, Wis.
"Needed Research in School Building Field," DR. T. C. HOLY, Ohio State University

Afternoon Session

Topic: "Trends—How They Affect School Finance"
"Changes in the Structure and Administration of American Education," DR. GEORGE D. STRAYER, Columbia University
"Financing School Plant Construction," RAYMOND V. LONG, Virginia State Department of Education
"Federal Relations to Education," DR. EUGENE S. LAWLER, Northwestern University
Report of research committee on simplified specification standards, JOHN W. LEWIS, Baltimore, chairman

Evening Session

Round Table Conferences

Thursday, October 13

Morning Session

Topic: "Trends—How They Affect School and Community Relations"
"Certain Social and Economic Trends as They Affect Education," NEWTON EDWARDS, University of Chicago
"School and Community Relations as a Coordinate Part of School Business Administration," DR. N. H. DEARBORN, New York University
"Implications of Educational Trends for Fiscal Management," PAUL J. MISNER

Afternoon Session

E. Transportation
Presiding: CHARLES D. ANDERSON, Trenton, N. J.
Secretary: J. C. HOEHLE, Wichita, Kan.
"Necessary Features in School Bus Construction," A. R. COSGROVE, General Motors Corporation
"The Economics of Lubrication in Public School Transportation," J. E. JURY, Shell Petroleum Corporation
Discussion: J. C. MCDONALD, Augusta, Ga.; C. H. R. FULLER, Toronto, Ont.
Report of research committee on transportation by CHARLES D. ANDERSON, chairman

F. Custodian Service
Presiding: H. S. MITCHELL, Dearborn, Mich.
Secretary: ROBERT L. HOLMES, Oak Park, Ill.
"The Custodian as Caretaker of Public Property," GEORGE W. GRILL, Lakewood, Ohio
Discussion: JOHN E. BAUMGARTNER, Davenport, Iowa; R. H. PARK, Lincoln, Neb.
"The Custodian as Engineer of the School Heating Plant," JAMES J. BALL, Denver
Discussion: S. J. STACHOWIAK, Hamtramck, Mich.; THOMAS F. KELLEY, Paterson, N. J.
"The Custodian as an Assistant in the Care of Pupils," FRANCIS W. BUROS, White Plains, N. Y.
Discussion: E. D. CLINE, Dubuque, Iowa; RUFUS A. PUTNAM, Evansville, Ind.

G. Cafeterias
Presiding: C. L. BARR, St. Louis
Secretary: W. V. DRAKE, Columbus, Ohio
"The School Lunchroom as a Part of the Educational Program," EVELYN SMITH, University of Illinois
"Trends in Nutrition and Health Education as They Apply to Public School Lunchrooms," MRS. ETHEL MARTIN, Chicago
Discussion: F. O. WASHAM, Chicago; W. E. STRICKLER, Pittsburgh; E. H. KIFER, San Antonio, Tex.
Report of research committee on cafeteria costs by A. A. KNOLL, Long Beach, Calif., chairman, with discussion by E. P. WILLIAMS, Fort Worth, Tex.

H. Finance
Presiding: MERVYN E. WIETHAUPT, St. Louis
Secretary: FRANK J. DUFRAIN, Pontiac, Mich.
"Financial Economies That May Be Secured Through Improved Business Administration," WILBUR J. WOLF, Omaha, Neb.
Discussion: ALFRED H. CLARKE, Chicago
"The Preparation and Control of the School Budget," PHILIP J. HICKEY, St. Louis
Discussion: A. H. BELL, Gary, Ind.; HARRY M. HOWELL, Los Angeles
"School Revenues and Trends That May Influence Them," HELEN K. THOMPSON, Greenville, Pa.
Discussion: Charles E. Lane, Quincy, Ill.; ALBERT HODGINS, Toronto, Ont.

Friday, October 14

Morning Session

Topic: "Trends—How They Affect Organizations"
"You Are a Part of an Organization," M. A. CLARK, U. S. Rubber Company
Report of research committee on extracurricular activities, DR. JOHN GUY FOWLKES, University of Wisconsin, chairman

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Increased attendance, larger classes and crowded workrooms—these are the problems that face every School Board. Be sure the equipment you install now will permit your school to grow. Kewaunee Engineers have for 33 years made a special study of providing equipment that permits school growth and the handling of maximum enrollment and larger classes without handicapping either instructors or students.

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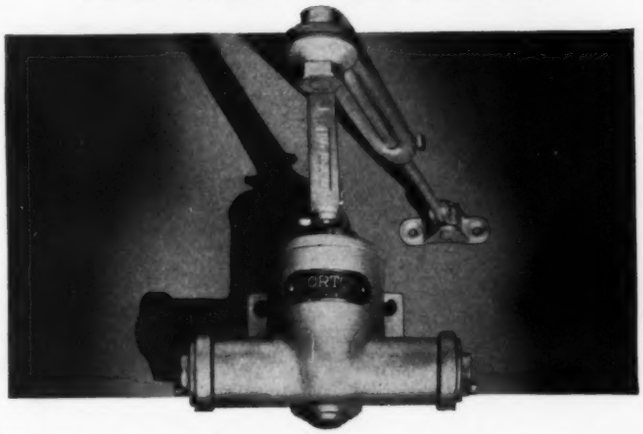

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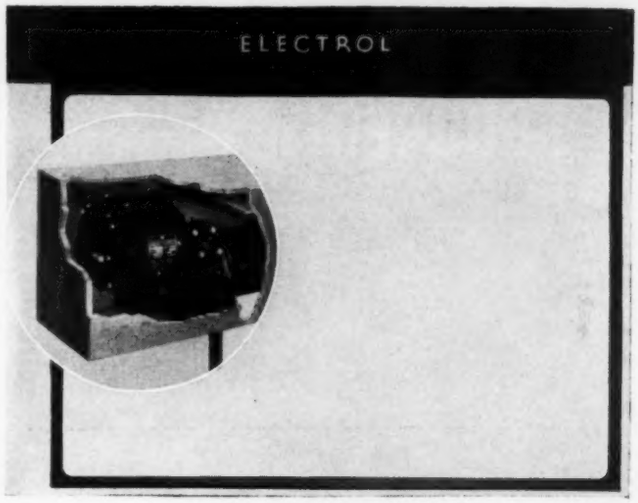

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Filmosound 138, illustrated, is typical in precision-quality of the compact, capable projectors offered at these low prices. This model provides theater-perfect performance in classroom or moderate-sized auditorium. It projects both sound and silent films, permits reverse and still projection, has speaker-hiss eliminator, 750-watt lamp, and three-quarter-hour film capacity. The single-case model is now only $346 ($39 saving); two-case, as shown, $369 ($41 saving). Send coupon for complete details on all sound and silent projectors.

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Show Recent Hollywood Films in Your School Movie Programs

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VISUAL EDUCATION

Clearing House for Films

A liaison between motion picture producers and users has been formed to foster the production and distribution of educational films. It has the corporate name of the Association of School Films Libraries and Fanning Hearon, formerly director of the division of motion pictures, U. S. Department of the Interior, is the executive director. Headquarters are in the Time and Life Building, New York.

Membership in the association is open to educational institutions and noncommercial distributors serving the educational field.

Through this agency all films can be ordered from one source instead of several; information on motion pictures available separately from hundreds of organizations will be cleared through this one central clearing house; efforts of the association will make available films which might not otherwise be released for the use of educational institutions; collective action on the part of the members will make possible the production and distribution of films which would not otherwise be available; the collective experience of all the members of the association in selecting, previewing and evaluating films will be available to members; pooled orders will lower costs of distribution to producers thus lowering costs to users, and efforts will be made to establish additional film libraries, thus expanding the market for films.

The organization of this association is chiefly through the efforts of the American Council on Education. It was incorporated in the District of Columbia under Act of Congress on June 17, 1938. The following comprise its board of directors: Harold C. Bauer, superintendent of schools, New Ulm, Minn., and chairman, Northwest Audio-Visual Committee; Thomas Fansler, director, research department, division of general education, New York University; Charles F. Hoban Jr., director, motion picture project, American Council on Education; John A. Hollinger, director, department of science, nature study, school gardens and visualization, Pittsburgh public schools; Boyd B. Rakestraw, assistant director, extension division, University of California; Paul C. Reed, supervisor, visual and radio education, Rochester, N. Y., and J. C. Wardlaw, director, division of general extension, University System of Georgia, and president of the Southern Audio-Visual Association.

Mr. Wardlaw is president of the board and Mr. Rakestraw, vice president. Membership is $25 a year.

Schoolman Is Photographer

H. C. Lanks of the high school faculty of Jenkintown, Pa., was com-

Films for the School Screen

American History—2. The Revolution

Hats Off—Story of the Flag—American heroes from Betsy Ross to George Washington. Flag etiquette. 1 reel. 16 mm., silent. For rent. University of Missouri, Visual Education Service, Columbia.

War of the American Revolution, I—Animated maps showing plan of campaign during the war: the attempt by Burgoyne, St. Leger and Clinton to divide the colonies; the importance of the battle of Saratoga; the Southern campaign which terminated with victory at Yorktown; scenes of the battlefields at Lexington and Saratoga. 1 reel. 35 mm., silent. For rent. F. C. Pictures Corporation, 505 Pearl Street, Buffalo.

War of the American Revolution, II—Animated maps showing the preliminary moves; the American attempt to capture Canada and the British attempt to isolate New England; the capture of Vincennes; the Southern campaign ending in Cornwallis' surrender. 1 reel. 16 mm., silent. For rent. Visual Education Service, 131 Clarendon Street, Boston.

Washington, George—His Life and Times—An Eastman teaching film prepared at the request of the U. S. Washington Bicentennial Commission. Each reel covers an era in the life of Washington. 4 reels. For sale, Eastman Kodak Company, Teaching Films Division, Rochester, N. Y. For rent, 16 mm. Edited Pictures System, Inc., 330 West Forty-Second Street, New York; National Cinema Service, 3 West Twenty-Ninth Street, New York. For rent, 35 mm. Ideal Pictures Corporation, 28 East Eighth Street, Chicago.

Chronicles of America—History series made by the Yale University Press: Eve of the Revolution, 3 reels; Declaration of Independence, 3 reels; Yorktown, 3 reels. For rent or for purchase. 16 and 35 mm., silent. Yale University Press Film Service, 386 Fourth Avenue, New York.

missioned by the highway division of the Pan-American Union to take 5000 feet of motion picture film over the international highway route through seven Latin American countries last summer. His associate was V. Theodore Schreiber, Pan-American lecturer and authority on the Pan-American highway.

Use of Safety Glass

The manufacture and use of safety glass are told in a new two reel silent motion picture film entitled "Safety Glass," which is the latest addition to the educational film library of the U. S. bureau of mines.

The great measure of protection afforded by the use of safety glass in automobiles is demonstrated in the opening scenes. This episode is followed by scenes showing the quarrying and loading of silica sand, the principal ingredient of safety glass, and its transportation to the mill, where it is screened, crushed, ground, dried and conveyed to the glass plant. Operations within the plant incidental to the manufacture are next illustrated.

Copies of this film are available in 16 and 35 mm. sizes. Applications for the film should be addressed to the Bureau of Mines Experiment Station, 4800 Forbes Street, Pittsburgh. No charge is made for the use of the film although the exhibitor must pay transportation charges.

Cooperative Film Library

By the middle of August 120 Michigan schools had responded to a letter mailed 1500 Michigan educators by the extension division of the University of Michigan proposing a cooperative film service. An enrollment fee of $50 charged each member school will purchase approximately 300 films to form the basis of the loan library. Schools participating in the plan will have the privilege of selecting the films they desire to borrow from this library.

Aluminum Chemistry

To assist teachers of chemistry and industrial arts in presenting the chemistry of aluminum to their pupils, the Aluminum Company of America has prepared a display chart on the manufacture of aluminum. Scenes of the mining and manufacture of the raw material serve as a background for the actual samples of the various raw materials. The electrolytic cell in which the metal is made also is illustrated and the history of the product and its chemistry are briefly described. The chart is designed for hanging on the classroom wall and may be obtained without charge by writing to the company at 2106 Gulf Building, Pittsburgh, on the letterhead of the school.

RADIO

Starts Tenth Season

Columbia network's "American School of the Air" will start its tenth consecutive season on Monday, October 10. The program will be heard each school day, Monday through Friday, from 2:30 to 3 p.m. (E.S.T.) Four educational groups are acting in an advisory capacity for this year's program: the N.E.A., the Progressive Education Association, the National Council of Teachers of English and the American Library Association.

The study of democracy, here and abroad, will form the background of the first semester's broadcasts. Monday programs are entitled "Frontiers of Democracy"; Tuesday, "The Music of America"; Wednesday, "The Lives Between the Lines"; Thursday, "This Living World," and Friday, "New Horizons."

Two Short Wave Stations

New York City has been granted permission to set up a station in the

Neo-Shine
WATERPROOF • SELF-BUFFING • WAX
..and Neo-Shine laughs at water too!
Your janitor can swish a soaking wet mop over a Neo-Shine waxed floor, time after time, without penetrating its water-proof armor. For Neo-Shine contains the No. 1 grade of Carnauba wax and bone-dry, bleached shellac. It has a wax content twice as high as the ordinary non-buffing wax. Thus, a Neo-Shine wax film is tougher. That is why it saves frequent, expensive rewaxing. You can have Neo-Shine's stubborn resistance tc traffic, wet shoes, and the dripping mop without any extra charge. Order a drum—today.
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On the Air During October

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Monday

2:30-3:00 p.m.—American School of the Air, "Frontiers of Democracy," beginning October 10 (CBS).

5:45-6:00 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

11:30-11:45 a.m.—General Federation of Women's Clubs, consumers' program (NBC Red).

2:30-3:00 p.m.—American School of the Air, "The Music of America," starting October 11 (CBS).

2:30-3:00 p.m.—NBC Music Guild (NBC Blue).

5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

7:45-8:00 p.m.—The Roving Prof. William Montgomery McGovern discusses little known sidelights of life around the globe. (NBC Red).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association.

PERSONAL HEALTH SERIES

October 12—What Is Health?
October 19—Going Strong.
October 26—Seeing and Hearing Well.
November 2—Healthier Boys and Girls.

2:30-3:00 p.m.—American School of the Air, "The Lives Between the Lines," beginning October 12 (CBS).

5:45-6:00 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).

7:30-7:45 p.m.—Living History, CBS adult education series.

7:45-8:00 p.m.—Science on the March, under auspices of the American Society for the Advancement of Science (NBC Blue).

Thursday

2:30-3:00 p.m.—American School of the Air, "This Living World," starting October 13 (CBS).

4:00-4:15 p.m.—Of Men and Books, Prof. John Frederick of Northwestern University reviews books and interviews guest authors (CBS).

5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs, CBS adult education series.

Friday

2:00-3:00 p.m.—Walter Damrosch Music Appreciation Hour, starts October 7 (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "New Horizons," begins October 14 (CBS).

5:45-6:00 p.m.—"So You Want to Be a ——." A child interviews representatives of various professions, *i.e.* reporter, policeman, sea captain (CBS).

7:15-7:30 p.m.—Music Is My Hobby (NBC Blue).

7:30-7:45 p.m.—Adventures in Science, Dr. Lawrence Kelso Frank, sociologist, commentator, CBS adult education series.

Saturday

10:30-10:45 a.m.—The Child Grows Up (NBC Blue).

12:00-12:30 p.m.—NBC Music Guild (NBC Red).

8:30-9:00 p.m.—Original Plays (NBC Red).

Sunday

4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institute (NBC Red).

6:00-6:30 p.m.—Music for Fun (CBS).

8:00-8:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

10:30-11:00 p.m.—University of Chicago Round Table (NBC Red).

[1]Except Sunday.

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ultra-high frequency band for nonprofit educational broadcasting by the Federal Communications Commission. School officials expect to reach the city's entire school population through this channel. Cleveland also has been granted a high-frequency station, and a score of other city and county school systems, colleges and universities are considering making application for station-construction permits, according to the U. S. Office of Education. One or two radio equipment companies are ready to quote prices on transmitting and receiving apparatus, and the Office of Education is gathering information.

Modern...Compact AND *Comfortable*

The Heywood SDK 15 is a noteworthy example of good modern design. It is a compact unit which saves valuable space without sacrifice of comfort. It provides correct and scientific posture for the pupil. It permits flexible seating arrangements. The sturdy, streamlined frame is of heavy gauge steel tubing with flawless chromium plating or enamelled finish, as desired.

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PUBLICATIONS

Manitoba's New Journal

With the September issue, volume 1, number 1 of the *Manitoba School Journal* made its bow to the teachers and school boards of Manitoba. The new publication is the official journal of the Manitoba Department of Education. Its bright yellow cover is illustrated by a black outline of the province with a North American bison superimposed on the map. The type dress is neat and easy to read and its format is a convenient size. Harry B. Hunter is the editor.

BUILDINGS

Study Air Conditioning

Air conditioned classrooms, resulting in staggered school terms, is a project under study by school authorities in Louisville, Ky. If found practical and economical in other metropolitan communities, it may be tried out in Louisville, according to Stephen S. Jones, president of the Louisville board of education. But first proof must be had that such modernizing is practicable.

Authorities believe that with air conditioned buildings, the length of school terms could be staggered. Shorter and more frequent terms might be arranged, interspersed with brief vacation intervals fitted in several times during the years.

Two months each year could be gained by operation of schools on continuous schedules. This full-time use of plant and equipment might reduce the need for new buildings, officials pointed out, but would necessitate spreading the teaching and maintenance staffs.

The big obstacle, President Jones said, is finances. There are approximately 75 main school buildings in the Louisville system and to air condition them "would be an expense that we would not even contemplate asking the city for at this time."

Some of the new schools have air conditioning of a sort, heated air being washed by machinery and by artificial circulation changed continuously.

Preferable to Transportation

Voters of Meadville, Pa., have approved a bond issue covering the local school district's share of the expense of a school building project totaling $257,500 for two new elementary school buildings. One building, containing primary rooms, will be located at the extreme northern end of the city to accommodate primary pupils who are now required to walk more than a mile to their school. The school district has decided that it is wise to recognize the petitions of parents who are asking for primary school facilities near their homes, although district officials realize that this is contrary to practice in most schools, Supt. Warren P. Norton said. It seems to be preferable, he said, to providing transportation facilities.

As Done in Pennsylvania

Under the new Thompson plan, adopted by a special session of the Pennsylvania general assembly, an estimated one thousand new and improved school buildings will dot the educational landscape of Pennsylvania during the current school year.

The new program has two major objectives: (1) to assist school districts unable to finance long-needed new buildings and (2) to provide employment for men out of work.

The federal government is contributing 45 per cent of the total cost of the new projects through P.W.A. and the general state authority of Pennsylvania will sell bonds to provide the remaining 55 per cent. Jointly, the state and local school districts will share in a rental plan to amortize the bonds.

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USE OF YOUR OWN RADIO SET AND HIGH IMPEDANCE PHONOGRAPH UNIT

For small additional cost:

"Return Speech" feature, permitting two-way conversation between Superintendent's or Principal's office and any room in circuit. "Call In" switch, permitting any room to call the main office.

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CITY.....

Among other features of the law are the following principal provisions:

1. The general state authority is permitted to acquire property from school districts to erect, furnish and equip school buildings and to lease them to school districts for a period not to exceed thirty years, at a rental that will amortize the general state authority's share of the construction cost of the buildings.

2. The department of public instruction is empowered to join with any school district in entering into any of the contracts and leases with the general state authority.

3. The law appropriates to the department of public instruction the sum of $1,000,000 for the purpose of paying the commonwealth's share of rentals for public school buildings and improvements constructed or improved by the plan and any expense of the department in the administration of any laws.

State College Programs

California has allocated $2,073,000 as the state's share of the proposed P.W.A. construction program for state colleges and special schools. If the projects are approved by the federal government, the following amounts will be available from the combined federal and state grants: Humboldt State College, $909,091; Santa Barbara State College, $1,000,000; San Francisco State College, $1,000,000; San Jose State College, $500,000; California School for the Blind, $100,000, and California School for the Deaf, $260,000.

ADULT EDUCATION

P.-T.A. Publicity

A series of local radio broadcasts that interpreted the parent-teacher movement to the people of Muskegon, Mich., bolstered the membership of the local parent-teacher association from 955 to 1600 last year.

Joint Conference

"Adult Education and Social Action" is the theme selected for the joint conference of the Pennsylvania State Association for Adult Education and the Middle Atlantic States Regional Conference on Adult Education to be held at Temple University, Philadelphia, October 26 to 28.

Dr. Albert Lindsay Rowland, president of State Teachers College, Shippensburg, Pa., will open the general session on October 26. Dr. Charles Beury, president of Temple University, and Dr. William Henry Welsh, assistant to the associate superintendent in charge of staff, Philadelphia board of public education, also will speak.

Prominent educators who have agreed to lead and participate in discussions are: Dr. Henry Klonower, director, teachers' education and certification, Pennsylvania department of public instruction; Dr. John W. Studebaker, U. S. commissioner of education; Morse A. Cartwright, director, American Association for Adult Education; Rabbi Edward L. Israel, Baltimore; Dr. Ross O. Runnels, principal, Maplewood Junior High School, South Orange and Maplewood, N. J.; Helen Hall, Henry Street Settlement, New York, and Dr. Walter J. Campbell, educational adviser, extension division, Town Hall, Inc., New York.

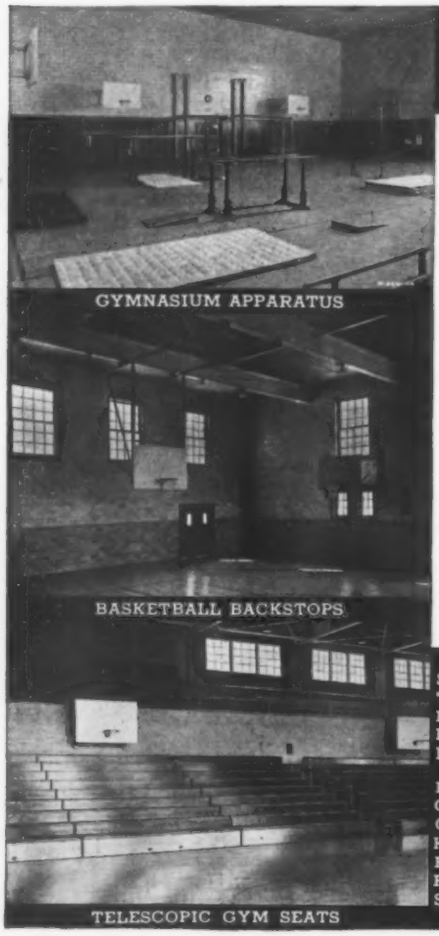
NAMES IN NEWS

Superintendents

C. M. DICKEY has retired as superintendent of schools, Conneaut, Ohio, and has been succeeded by NORMAN C. KOONTZ, formerly of Indiana, Pa.

W. E. PHIPPS, former state commissioner of education, is the new superintendent of schools at Russellville, Ark.

CORNELIUS TURNER has been elected



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superintendent of schools at Leicester, Mass.

W. C. SULLIVAN, principal of Rock Hill High School, Rock Hill, S. C., has been elected acting superintendent of Rock Hill schools, succeeding the late R. C. BURTS.

C. H. PINNER, former superintendent of schools at Mount Olive, N. C., is the new superintendent at Tabor City, N. C.

E. K. BARDEN has been reelected superintendent of schools at Sugar Land, Tex., for a three year term. The twelve grade plan, prepared by members of the faculty under the direction of Superintendent Barden, was installed at the opening of the Sugar Land schools in September. This is one of the first schools in Texas to adopt this plan of organization.

DR. EDWARD D. ROBERTS, whose position as superintendent of schools in Cincinnati was terminated in late August, has announced that he is available as an educational consultant to superintendents and to boards of education, the *Cincinnati Times-Star* reports. Doctor Roberts also will devote a part of his time to educational writing and research and will probably accept an offer from an eastern university to act as professor during the summer of 1939.

TOBIN HAGGERTY, former supervising principal at North Troy, Vt., and former principal at Enosburg Falls, Vt., is the new superintendent of the southwest school district at Windsor, Vt. He succeeds SAMUEL H. WHITE, who has accepted the superintendency at Danielson, Conn. This is the only change in superintendencies in Vermont for the school year 1938-39, according to FRANCIS L. BAILEY, Vermont commissioner of education.

Principals

MARY COURTNEY MOORE, assistant principal of the Girls' High School, Atlanta, Ga., since 1916, has been named acting principal to succeed JESSIE MUSE, who is retiring. At the same time the Atlanta board of education elevated ROY W. DAVIS, Boys' High School social science teacher, to the principalship of Hoke Smith Junior High School to succeed L. O. KIMBERLY, retired, and PAUL STANLEY WOODWARD, assistant principal of the Opportunity School, to succeed the late DR. C. H. KICKLIGHTER as the principal.

HAROLD H. ELTING and HOWARD G. SACKETT, the former an elementary school principal at Port Jefferson Station, Long Island, and the latter serving in the same capacity at Lockport, N. Y., have been appointed principals of the Governor Clinton and S. F. B. Morse schools, respectively, of Poughkeepsie, N. Y.

IRA R. HENDRICKSON has retired as principal of Mount Morris High School, Mount Morris, Ill., upon completion of forty-one years of educational service, thirty-four of which have been spent in continuous service in Mount Morris schools.

J. L. LAUGHLIN, former vice principal of Central High School, Kansas City, Mo., is the new principal of East High School of that city, succeeding C. H. NOWLIN.

PAUL A. REID of Roanoke Rapids, N. C., is the new principal of the Needham B. Broughton High School, Raleigh, N. C.

FRED TOTTEN, teacher of methods and teacher training at Indiana University, has been named principal of the high school at Bedford, Ind.

FREDERICK G. WARD is the new principal of Sharon High School, Sharon, Mass.

JOHN C. GROOME, former principal of Gloucester High School, Gloucester, N. J., has succeeded MRS. GRACE DOWNING as supervising principal of schools at Runnemede, N. J.

W. STANLEY PORTER, high school principal, Franklin, Ind., has resigned

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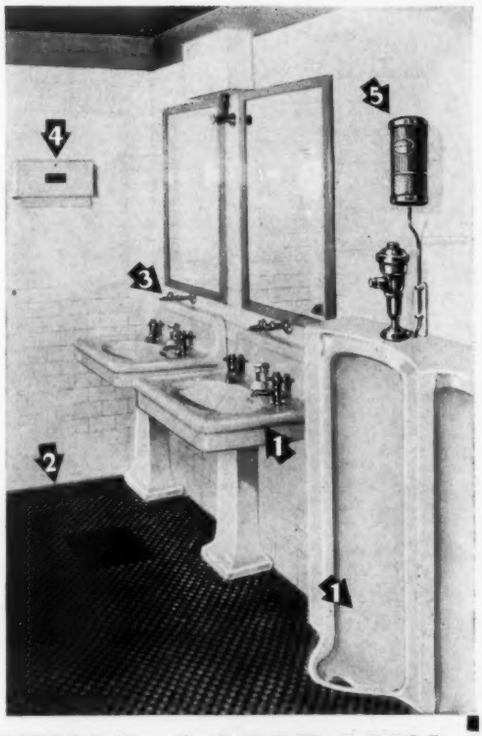
1 No matter how efficient automatic deodorizing devices may be, the daily or routine use of a cleansing disinfectant such as CORO-NOLEUM on washroom floors, basins, seats, etc., is important.

2 As all floor surfaces are more or less porous, it is necessary to seal them. Washroom floors finished with FILPOR will not only help prevent destructive elements from entering the pores of the floor, but will always look better and be easier to keep clean.

3 The use of liquid soap, besides being sanitary and efficient, eliminates waste. The WEST LATHERATOR VALVE automatically agitates the soap into a rich creamy lather *before* it leaves the valve, thereby saving the usual waste, as none of the soap runs off the hands. Latherator Valves can be installed in your present system at small cost.

4 The West Disinfecting Company manufactures a complete line of paper towels from fresh, clean pulp in its own mills. Standardized quality is obtained by expert scientific manufacturing control. West towels are made in either Junior or Senior sizes and in 32 lb. or 38 lb. basic weights. In addition, the TANDEM (double towel) is obtainable and is popular with commercial organizations where costs are carefully checked.



5 An efficient method of deodorization in lavatories is the WEST AUTOMATIC DRIP MACHINE. The special drip fluid spreads on the surface of the water, and helps overcome bad odors at the source. The results obtained through the use of this modern apparatus have been so thoroughly satisfactory that it has been recognized as a most practical, economical and efficient method for elimination of washroom odors.

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Coming Meetings

Sept. 7-10—American Psychological Association, Ohio State University.

Oct. 10-14—National Association of Public School Business Officials.

Oct. 13-15—Vermont Education Association, Burlington.

Oct. 13-15—Utah Education Association, Salt Lake City.

Oct. 17-22—Nevada State Education Association, Reno.

Oct. 19-21—New Hampshire State Teachers' Association, Concord.

Oct. 20-22—Wyoming Education Association, Rawlins.

Oct. 26-28—West Virginia State Education Association, Charleston.

Oct. 26-28—North Dakota Education Association, Fargo.

Oct. 27-28—Indiana State Teachers' Association, Indianapolis.

Oct. 27-28—Maine Teachers' Association, Bangor.

Oct. 27-29—Rhode Island Institute of Instruction, Providence.

Oct. 27-29—Minnesota Education Association, Minneapolis.

Oct. 27-29—Rhode Island Institute of Instruction, Providence.

Oct. 27-29—Montana Education Association, district conventions, Kalispell, Billings, Great Falls and Bozeman.

Oct. 27-29—Colorado Education Association, district conventions, Denver, Pueblo and Grand Junction.

Oct. 28—Connecticut State Teachers' Association, New Haven, Hartford and Bridgeport.

Oct. 28-29—Maryland State Teachers' Association.

Nov. 3-5—Iowa State Teachers' Association, Des Moines.

Nov. 3-4—Arkansas Education Association, Hot Springs or Little Rock.

Nov. 4-5—Conference of Food Service Directors, Rochester, N. Y.

Nov. 4-5—Kansas State Teachers' Association, Kansas City, Topeka, Salina, Hays, Garden City, Hutchinson, Wichita and Pittsburg.

Nov. 6-12—American Education Week.

Nov. 10-11—Delaware State Education Association, Newark.

Nov. 10-12—New Jersey State Teachers' Association, Atlantic City.

Nov. 14-17—National Council on Schoolhouse Construction, Frankfort, Ky.

Nov. 16-19—Missouri State Teachers' Association, Kansas City.

Nov. 17-19—Louisiana Teachers Association, Baton Rouge.

Nov. 20-23—South Dakota Education Association, Mitchell.

Nov. 22-25—Virginia Education Association, Richmond.

Nov. 24-26—Texas State Teachers' Association, Dallas.

Nov. 24-26—National Council of Teachers of English, St. Louis.

Nov. 25-26—Idaho Education Association, Boise.

Nov. 25-26—National Council for the Social Studies, Pittsburgh.

Nov. 30-Dec. 3—American Vocational Association, St. Louis.

Dec. 1-3—Arizona Education Association, Phoenix.

Dec. 27-29—Ohio Education Association, Columbus.

Dec. 28-30—Oregon State Teachers Association, Portland.

Dec. 28-30—Oregon State Teachers Association, Portland.

Feb. 25-March 2—American Association of School Administrators, Cleveland.

March 23-25—Georgia Education Association, Atlanta.

to accept a position as vice principal of the high school at Anderson, Ind.

CHARLES T. HASSARD of Gloucester City, N. J., has been named new supervising principal of schools at Union, N. J.

REV. T. GERALD MULQUEEN is the new principal of Catholic Central High School, Troy, N. Y. He succeeds REV. EDMUND J. BURNS, who has been named pastor of St. Joseph's Church, Troy.

COL. FRANK L. MEAGHER has been made principal of the new Myron J. Michael Schools, Kingston, N. Y.

RAY HANDLEY has been named principal of the school at Cromwell, Ind.

THEO R. WRIGHT, principal of Baker School, Birmingham, Ala., has been appointed head of the Birmingham school division of the Community Chest drive.

NED PACKARD is the new principal of the high school at Jefferson, Maine.

ROBERT E. SHEETZ, a member of the high school faculty for the last eight years, has been elected supervising principal of schools, Hellertown, Pa.

H. M. WILLIAMSON of Spencer, W. Va., has been named acting principal of Tarentum High School, Tarentum, Pa.

PHILIP L. SMITH, supervising principal at Bethel, Vt., has retired from

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teaching because of ill health. The Bethel school district has been added to the Windsor northwest district which gives SUPT. S. C. HARDING a total of 47 teachers, the average size for a union district in Vermont.

FRANCIS L. BAILEY, commissioner of education in Vermont, has announced the following new principalships in Vermont high schools during the current school year: HAROLD YASINSKI, Benson; CHARLES P. NASON, Bethel; LYNWOOD B. PECK, Canaan; HARRY O. SWETT, Danby; GEORGE V. DRABBLE, Enosburg Falls; HENRY HOLZ, Middletown Springs; ALDEN C. UTTON, North Troy; ROBERT W. CHUTTER, Pittsford; JESSE E. SUNDERLAND, Poultney; WILLIAM H. ALLEN, Quechee; CHANDLER KIMBALL, Rochester; PORTER C. GREENE, Stowe; RAYMOND B. TALBERT, Waitsfield, and JOHN A. THORPE, Woodbury.

In the Colleges

DEAN PAUL C. PACKER of the college of education, University of Iowa, and President Edward C. Elliott of Purdue University sailed August 20 for the Philippine Islands to be gone five months. The two educators will serve as an educational advisory committee for the University of the Philippines.

DR. JAMES B. STROUD has been appointed an associate professor on the staff of the college of education of the University of Iowa. Doctor Stroud has been with the Kansas State Teachers College at Emporia for the last few years and is the author of two psychology textbooks.

DR. WILSON ELKINS, Rhodes scholar, former University of Texas athlete and a member of the University of Texas faculty, has been appointed president of San Angelo College, San Angelo, Tex.

DR. L. B. EZELL, former head of the department of education, Bethany College, Lindsborg, Kan., has accepted an assistant professorship in education at Texas Technological College, Lubbock.

DR. HARRY K. NEWBURN of the University of Iowa college of education sailed recently for England where he will spend three months in study under a grant from the Carnegie Corporation.

DR. VIRGIL E. HERRICK, director of research, Milwaukee Country Day School, and instructor at the University of Wisconsin during the summer sessions, has been appointed assistant professor in elementary education in the school of education, Syracuse University, to succeed DR. WILLIAM E. YOUNG. Doctor Young was appointed director of elementary education in the New York State Education Department at Albany. Doctor Herrick will give courses in elementary education and will have charge of a reading clinic. Some of his time will be devoted to research in the field of reading.

CHARLES E. LAWALL, director of the school of mines, has been made acting president of West Virginia University.

DR. THOMAS W. BIBB, former president of Albany College, Albany, Ore., recently was elected president of Missouri Valley College, Marshall, Mo., succeeding DR. GEORGE H. MACK.

DR. MARJORIE MITCHELL, a recent graduate of Columbia University, has been appointed president of Cottey Junior College for Women at Nevada, Mo.

E. M. BALSBAUGH, former superintendent of schools at Lansford, Pa., has become a faculty member of Lebanon Valley College, Annville, Pa., in the department of education. He will have charge of the teacher training department and placement bureau and will give a course in the history of education.

JOSEPH A. DAY, 44, principal of Fort Smith Junior High School, Fort Smith, Ark., for nearly ten years, has been elected president of Henderson State Teachers College, Arkadelphia, Ark.

RAYMOND BASSETT, former principal at Stowe, Vt., and secretary of the Ver-

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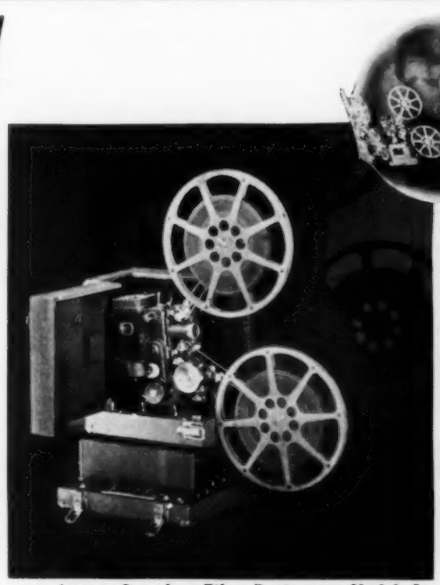
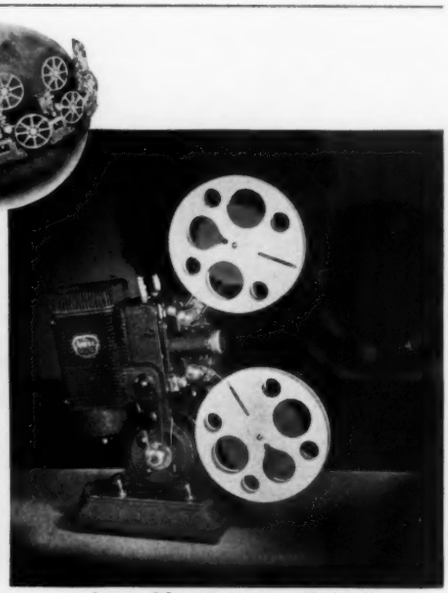


Ampro Sound-on-Film Projector—Model L



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mont Education Association, has been elected to the faculty of Goddard College.

Dr. Lashley G. Harvey, who has just completed graduate work at Harvard University, is a new assistant professor in the departments of education and political science at the University of New Hampshire.

Rufus D. Smith, the provost of New York University, discusses the effects of our declining population growth upon the American educational system in the September issue of *Survey Graphic*.

Dr. J. Erle Grinnell, formerly director of liberal arts and education at the Stout Institute, Menomonie, Wis., has been appointed dean of instruction, Indiana State Teachers College, Terre Haute, Ind.

State Departments

Dr. Warren W. Knox, acting director of the division of examinations and inspections of the New York State Education Department, has been appointed to the newly established position of director of the division of secondary education.

T. M. Trimble of Fort Worth, Tex., has been appointed first assistant state superintendent of schools in Texas.

John E. Nelson, for the last five years supervisor of trades and industries in West Virginia, has been appointed to a like position in Vermont.

Miscellaneous

Dr. Leslie W. Kindred of the University of Michigan has been appointed new director of the Marsh Foundation School, Van Wert, Ohio. Doctor Kindred has been critic instructor at the University High School, Ann Arbor, Mich., and instructor in social sciences at the University of Mississippi and the University of California.

Dr. Lawrence F. Ashley is the new chief of the division of vocational education, Yonkers, N. Y. He replaces Dr. Lynn A. Emerson, who resigned as assistant school superintendent to join the Cornell University faculty.

William K. Cumming has resigned as principal of Caroline High School, Denton, Md., to accept the position of supervisor of the Town School of Jacob Tome Institute, Port Deposit, Md.

Clarence E. Dobbin has retired after thirty-eight years' service in the bureau of construction and maintenance of the New York City board of education. The deputy superintendent of school buildings began his career in 1900 as a draftsman in the construction bureau.

Dr. Albert A. Hamblen will succeed Mrs. Laura D. T. Lamont as headmaster of Prospect Hill School, Newark, N. J.

Edna P. Amidon has been appointed chief of the home economics service in the U. S. Office of Education succeeding Florence Fallgatter, who resigned to become head of home economics education at Iowa State College, Ames. The new appointment takes effect October 1.

James F. Gould, a member of the Minneapolis board of education, has been certified by the Civil Service Commission for the position of assistant superintendent of schools in charge of business affairs, a position to which he was appointed on June 15.

Deaths

Dr. Thomas Jackson Woofter, dean emeritus of the Peabody school of edution at the University of Georgia, died recently after a long illness.

J. A. Lunceford, principal of the Southside High School, Gadsden, Ala., for the last thirteen years, died recently following a week's illness.

Lewis W. Krieger, 47, principal of Kingston High School, Kingston, Pa., for the last nine years, died recently following a long illness.

George U. Moyse, principal of Glendale High School, Glendale, Calif., for thirty-five years, died recently.

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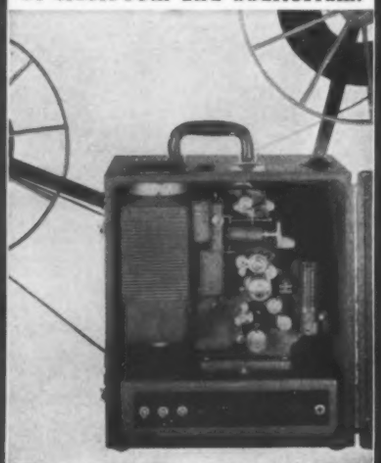

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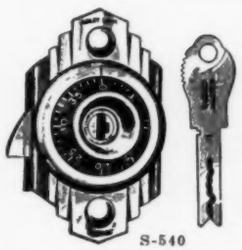
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THE BOOKSHELF

THE PAGEANT OF JAPANESE HISTORY. *By Marion May Dilts. Illustrated. New York: Longmans, Green and Co.,* 1938. *Pp.* xvi+380. $3.

Popular history well adapted for secondary school use. Excellent pictures.

SWEDES IN AMERICA: 1638-1938. *Edited by Adolph B. Benson and Naboth Hedin. Published for the Swedish American Tercentenary Association. New Haven: Yale University Press,* 1938. *Pp.* xvi+614. $3.

Symposium in 39 chapters on the contribution of the Swedes to the United States, written by a number of capable authorities. Interesting sidelights on facts generally unknown.

AMERICAN YOUTH. *An Annotated Bibliography. By Louise Arnold Menefee and M. M. Chambers. Prepared for the American Youth Commission. Washington, D. C.: The American Council on Education,* 1938. *Pp.* xii+492. $3.

Invaluable annotated bibliography on a variety of problems related to youth; a "must buy" for secondary school professional libraries.

VAGABOND VOYAGING. *The Story of Freighter Travel. By Larry Nixon. Boston: Little, Brown and Company,* 1938. *Pp.* xix+314. $2.25.

For teachers who desire to travel leisurely and reasonably this book is filled with valuable information and fascinating description.

. . . AND THE STUTTERER TALKED. *By A. Herbert Kanter, M.D., and A. S. Kohn. Boston: Bruce Humphries, Inc.,* 1938. *Pp.* 236, $2.

Stuttering described as a neuropathologic and physical disturbance rather than mere speech disorder. Significant point of view.

LET'S GO TO SCHOOL. *Integrative Experiences in a Public Elementary School. By Albion H. Horrall, Lydia E. Codone, Mabel S. Willson and Leah Smith Rhodes. Photographs by George E. Stone. McGraw-Hill Series in Education. New York: McGraw-Hill Book Co., Inc.,* 1938. *Pp.* xii+434. $3.

Description of progressive practices in an elementary school. Informative, suggestive and highly stimulating. Nice emphasis on the possibilities of the creative teacher.

LIFE AND GROWTH. *By Alice V. Keliher. With the Commission on Human Relations. Progressive Education Association Publications. New York: D. Appleton-Century Company, Inc.,* 1938. *Pp.* x+245. $1.20.

Written to assist young men and women to understand themselves as individuals and as members of the group.

TEACHING ARITHMETIC IN THE ELEMENTARY SCHOOL. VOLUME II, INTERMEDIATE GRADES. *By Robert Lee Morton. New York: Silver Burdett Company,* 1938. *Pp.* xii+538. $2.72.

Suitable as a text or reference book in the training of elementary teachers.

COLLECTIVE BEHAVIOR. *By Richard T. LaPiere. First Edition. New York: McGraw-Hill Book Company, Inc.,* 1938. *Pp.* xiii+577. $4.

Well considered and timely development of collective behavior. Sane and practical. Recommended for professional reading.

MODERN EDUCATION IN THE SMALL RURAL SCHOOL. *By Kate V. Wofford. New York: The Macmillan Company,* 1938. *Pp.* xiii+582. $2.75.

Valuable material for anyone teaching in the small rural school that still exists in such large numbers.

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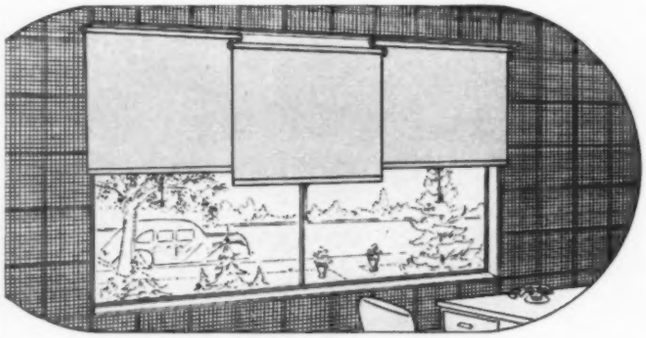

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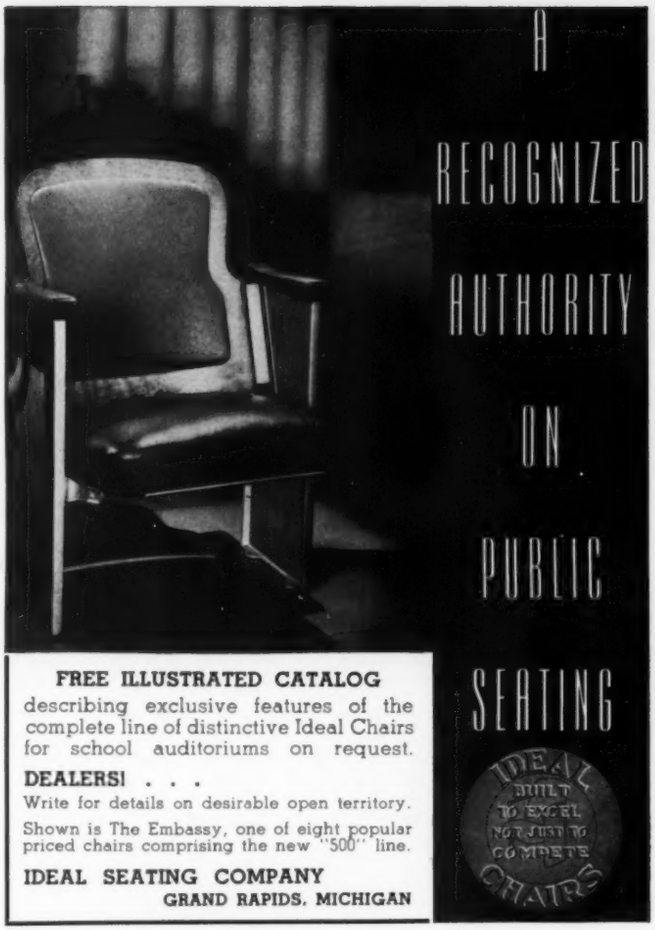

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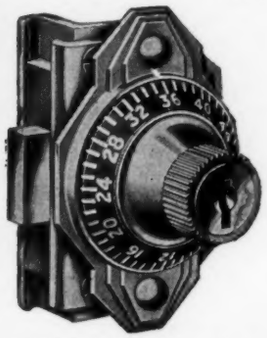

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GENTLEMEN AREN'T SISSIES. *(Grades 9-12.) By Norton Hughes Jonathan. Illustrated by Pelagie Doane. Philadelphia: The John C. Winston Company*, 1938. *Pp.* 216. $1.50.

TEACHERS' MANUAL FOR THE HARDY READERS. *(Second and Third Readers.) By Marjorie Hardy. The Child's Own Way Series. Revised. Chicago: Wheeler Publishing Company*, 1938. *Pp.* xvi+266. $0.50 *(Paper Cover).*

AN ANNOTATED BIBLIOGRAPHY OF AMERICAN HISTORICAL FICTION. *By N. J. Theissen. Kansas State Teachers College of Emporia Bulletin of Information. Studies in Education, No.* 14. *Emporia: Kansas State Teachers College of Emporia*, 1938. *Pp.* 65. $0.20. *(Supply Limited).*

EVERYDAY ENGLISH. *Eighth Year—First Half. By Jacob Lippman. New York: Globe Book Company, Inc.*, 1938. *Pp.* xiii+146. $0.92.

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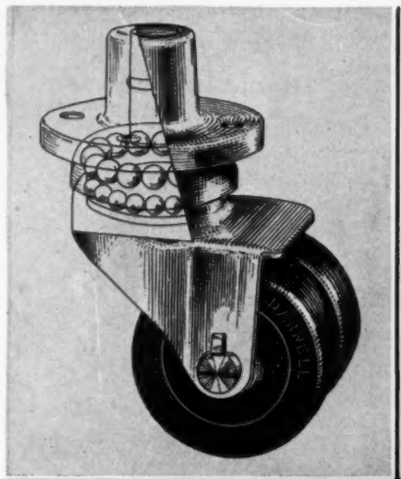

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NOTES FOR BUYERS

Without Benefit of Bucket

The bucket brigade is rapidly disappearing from the American scene, not only as fire fighting equipment but in housekeeping. One mechanical device after another is eliminating the old bucket and brush method of keeping buildings clean. Among them is the electrically driven wall washing machine. A newcomer to this field is the Standard wall washing unit offered by the Kay Manufacturing Company, 64 East Lake Street, Chicago. The machine consists of a two compartment copper tank equipped with a 30 pound air gauge and air pump. It is supplied with two patented wet trowels with 18 foot hoses and one dry trowel.

This unit uses a special turkish toweling instead of a sponge. It is necessary to change the towel for laundering only once every 100 to 500 square feet depending on dirt intensity.

Special cleaning compounds adapted for use with the standard unit are offered by the manufacturers. They are graded according to a number of variable factors which determine the type of cleaner that will give most satisfactory results under a given combination of circumstances.

Small Films in Large Rooms

Again the scope of 16 mm. film is extended. In announcing the new Filmoarc sound film projector, which employs an arc lamp for 16 mm. film illumination, the heretofore latent possibilities of 16 mm. film seem finally to be released, according to Bell and Howell Company, 1801 Larchmont Avenue, Chicago. For now, it is asserted, sufficient light is available for projecting brilliant images from 16 mm. film, color or black and white, in even the largest of auditoriums. Both sound and silent film speeds are provided so that either type of film may be shown at the proper operating speed. Two Filmoarc models are offered.

Screen Ups and Downs

The life of a motion picture screen has so many ups and downs that it is not surprising that the springs give out under the strain. With an eye to increasing the longevity of this important item of visual education apparatus, the Da-Lite Screen Company, Inc., 2723 North Pulaski Road, Chicago, has developed a motor driven model, Electrol by name, which is said to prevent improper handling by controlling the speed of rerolling and unrolling.

In the Electrol the screen is lowered to its operative position by turning the switch. By again turning the switch, the motor driven roller rewinds the screen up into its case. The automatic control prevents the possibility of the screen's being lowered or raised beyond the proper position.

The screen may be hung up, plugged in and operated from any desired point. Special brackets are included for wall or ceiling installation.

Snap for Small Schools

"They said it very loud and clear; they came and shouted in our ear," says Ditto, Inc., 2243 West Harrison Street, Chicago. The shouters in question were teachers who, it seems, have long voiced a need for a duplicating machine at low cost. Bowing to popular demand, Ditto presents Model H-4, a flat-bed gelatin duplicator with

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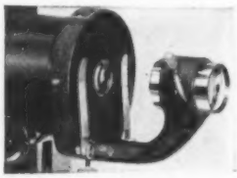
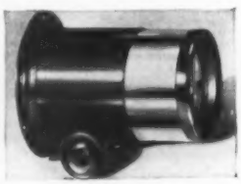


THE B & L MICRO-PROJECTOR ATTACHMENT allows use of microscope slides for projection material.



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carriage feed, including three films. The new model prints writing, typing or drawing in from one to eight colors at one operation, on tissue paper or card stock in sizes up to 9 by 14 inches. Equipped with rubber suction feet, the duplicator, it is claimed, fixes rigidly to any surface, yet is readily portable.

Swing Technic

There is a great fascination about swing doors (double-acting doors, we say in the trade) because you never know when they are going to catch some unsuspecting person on the chin or other prominent portion of the anatomy. Of course, that does not often happen. It would not happen at all to doors equipped with checking pivot hinges which the Oscar C. Rixson Company, 4450 Carroll Avenue, Chicago, has recently introduced. These hinges are for use on lavatory and shower stall doors. The device can be used on right or left hand single acting doors or on double acting doors without any change in the mechanism.

A unique feature of the hinge, to which the manufacturer points with pride, is an oscillating cam arrangement which provides full checking control all the way to closed position when the door is closed from either direction of swing. An automatic wear-take-up prevents the checking action from becoming irregular with use.

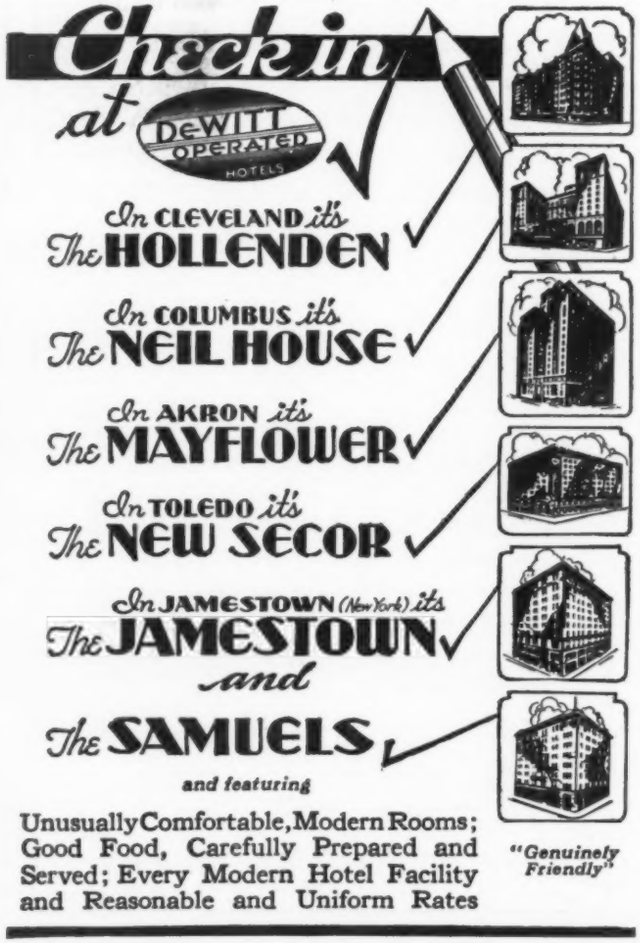
The weight of the door is carried by a ball bearing. Internal parts subject to wear are made of steel or malleable iron. The closing spring is of the torsion type. The hinge can be furnished in all plated or painted finishes.

Generalities

Visual education is rapidly dropping out of the luxury class and becoming an everyday method of teaching, according to reports from several manufacturers who are pleased to announce that increased volume of business has enabled them to lower the price of motion picture apparatus to a considerable extent. Quantity product, however, is not going to interfere with quality. In fact, it is claimed that many improvements in manufacture are included within the reduced prices.

The size and scope of RCA Victor's activities in the educational field have been increased under the direction of ELLSWORTH C. DENT, in order to coordinate the merchandising of all of the company's products that are applicable to the growing school market, according to an announcement by HENRY C. BONFIG, commercial vice president. The expanded educational department will have three important functions: (1) to determine the requirements of the educational market for radio, recordings and related sound products, by extensive surveys and studies; (2) to cooperate with important research organizations and governmental agencies in education, and (3) to coordinate the activities of RCA Victor in the production and sale of special products for school markets. Prior to joining the RCA Manufacturing Company, in 1936, Mr. Dent was chief of the motion picture division of the U. S. Department of the Interior. He has also had many years of specialized and general experience in the educational field.

Within the next few weeks the Westinghouse Electric and Manufacturing Company will deposit on the grounds of the New York World's Fair 1939 a Time Capsule containing a "cross-section of our times" with the expectation that it will be recovered by archeologists 5000 years from now. The country's foremost engineers, metallurgists, archeologists, historians, scientists, scholars and the public in general are being consulted, says DAVIS S. YOUNGHOLD, vice president, to make the project truly representative of our time.



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Side Glances—

NEW skyscrapers, none; factories, occasionally one; new homes, here and there; new schools, everywhere.

That's approximately the picture in the field of construction. According to the Construction Report issued by The NATION'S SCHOOLS October 19, school building projects have totaled more than a quarter-billion during the last twelve months. In the fortnightly interval between this report and the previous one, 200 new projects have been reported, totaling $37,193,568.

Alice Barrows, specialist of the U. S. Office of Education, is to be next month's headliner with the latest official figures on "P.W.A. and Schools." Her manuscript, now under preparation, will be withheld until close until press date so that the figures will be flash news.

PLATO would have had his ideal republic ruled by educated men. Admitting that his plan seems scarcely practicable in our day, it is still possible to believe that we lean too far toward the opposite extreme in local government in America.

We cannot help thinking of school boards and their educational qualifications. It would hardly seem that the completion of eighth grade would be too high a minimum to place upon these gentlemen who constitute a specialized legislative body acting as the agent of the state and of the community.

Yet when Kentucky set up the eighth grade as an educational qualification, there was considerable scrambling among board members to establish legal proof that they had attained such educational stature. M. M. Chambers of the American Youth Commission, in his monthly legal series, will describe

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this comparatively rare and interesting development in the Blue Grass state.

OUR state teachers' associations, do they blow hot, cold or merely lukewarm on the subject of federal aid for education? Arthur H. Rice of Michigan, who in October began a series of reports on the attitude of the teaching profession on current topics, knows the answer. He will share his new-found knowledge with you in the December number.

PROGRESSIVE administrators will anticipate pleasurably the two future contributions of Warren S. Holmes, after reading his views on kindergarten construction featured in this issue. Architect Holmes' December contribution will concern principles of design in the modern elementary school; in January, the high school building will be subjected to the same type of analysis.

GRADUATES who cannot find jobs are every high school's problem and gradually more vocational courses are being developed. In the fall of 1936 an experimental course in commercial foods was started in the cafeteria of the Topeka High School, Topeka, Kan. The class is open to girls between 16 and 25, so that out-of-school girls may be accommodated. Local restaurants cooperate by taking apprentices and the more proficient find permanent work there. Neosho Fredenburg, the school cafeteria director, will tell of the project in December.

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ADVERTISING PAGES REMOVED

LOOKING FORWARD

Bill Revision

THE National Education Association, through its legislative committee, is planning to revise the Harrison-Thomas-Fletcher Bill for extended federal aid to education before the next Congress meets in January 1939. This revision is an exceedingly wise decision, since the bill presented at the last session of Congress aroused so much opposition and emotion that it was doomed to failure. The proposed revision also offers opportunity to unite the teaching profession in favor of a single bill, provided the amended measure actually will safeguard the public schools from federal domination or control.

The first step necessary to convince the great majority of educators, who believe in retaining a decentralized educational policy organized by states, that proposals for federal aid do not contain possibilities of federal control is to seek amendment of the Smith-Hughes Act under which a high degree of centralized control over program in Washington has been built up within twenty years.

Lotus D. Coffman

DR. LOTUS D. COFFMAN, for eighteen years president of the University of Minnesota, died during September at the age of 63 years as a result of a heart ailment from which he had been suffering for two years.

A Hoosier by birth and education, Doctor Coffman spent the first decade of his forty-two year professional career, beginning in 1896, as principal and superintendent of Indiana public schools. He then accepted a position as a supervisor in an Illinois normal school, breaking this connection to finish his doctorate at Columbia University in 1911.

While in the East Doctor Coffman became fast friends with two other men, Henry Suzzallo and Walter A. Jessup, who also became university presidents. In 1912 Doctor Coffman accepted a position as professor of education at the University of Illinois, where he remained until called to the University of Minnesota as dean of the college of education. In 1920 the board of regents elevated him to the presidency, a position he held until his death. His name will always be closely associated in education with his two close friends, Suzzallo and Jessup, as the first outstanding men who advanced to large university presidencies from the field of specialization in professional education.

In addition to his unusually heavy load as president of the University of Minnesota, Doctor Coffman was extremely active up to the time of his illness in other aspects of education. He found time to participate in numerous educational surveys, particularly of state systems and institutions of higher learning. He was a strong member of the governing boards of the American Council on Education and of the National Youth Commission and was an able member of the Educational Policies Commission of the National Education Association. In addition, he frequently was called as adviser and consultant in the planning of research studies. He became associated early with the scientific movement in education and always maintained an active interest in the American Educational Research Association of which he was a life member. Institutions of higher learning in recent years recognized his unusual achievements by conferring honorary degrees. He was made a doctor of laws by six institutions. In addition, he received the degrees of doctor of science and doctor of humane letters.

In his political philosophy Doctor Coffman must be classed as a liberal. He had an immense faith in democratic processes and kept his administrative practices consistent with his democratic beliefs. He came to the presidency of the University of Minnesota during a trying period and was responsible in a large measure for the development of policies that have brought this institution to front rank in the last two decades.

In his relations to his colleagues he was always friendly but also objective. His passion for research was definitely carried over into his work, where he analyzed problems by recourse to the scientific method before attempting solution. He stimulated interest in research in all areas on the part of his colleagues and, like Jessup, tried to bring about a sensible integration between the several colleges and professional education. He succeeded during the course of his administration in gradually harmonizing many of the con-

flicts that normally exist between professional education and the older disciplines.

If one were to point to his major contribution in educational administration, it might be the complete recognition of the democratic nature of the education function in the American culture and his appreciation of the state university as a definite and integral part of the public educational system. The plans of Angell, Harper and Eliot for the reorganization of secondary education were placed into effect at Minnesota some years ahead of other institutions by creating a general college for the conventional freshman and sophomore years. Doctor Coffman believed that the advanced institutions had a definite responsibility in teaching the students they admitted and, instead of attempting to place blame for failure upon secondary schools, he attempted rather to discover through careful research weaknesses in the advanced rather than the preparatory institution. His pioneer work in this area should have far reaching influence throughout the country.

Unobtrusive and with a sincere dislike for the trappings and limelight of publicity, Doctor Coffman quietly went about his business, pushing others forward and giving full credit for colleague achievement. He will undoubtedly rank as one of the outstanding contributors to the advance of public education and university administration in his generation.

Equalizing Opportunity

FOR more than a generation the educational press and platforms have echoed to the educators' demand for "equalization of educational opportunity." Yet when one analyzes carefully the typical declaration by the educator or the specific programs of professional education associations there always seems to be a big gap between the idea and the full implications of the program.

Equalization of educational opportunity is essential in any democratic organization of life. However, the problem of equalization of opportunity is not simple. It offers at least three phases in as many different areas. Equalization of tax burden is undoubtedly of real importance. Ideal educational conditions cannot exist if one community's effort to provide good schools is many-fold that of more favorably situated areas. The location of wealth is in a large sense accidental. Concentrations of wealth in certain areas and in large urban centers have created great unevenness in current educational opportunity. Equalization of tax burden is normally the first step toward complete equalization of opportunity and its emphasis may be easily justified.

It is possible, however, to pay too much attention to one aspect of a complex program to the neglect of the other factors. Equalization of educational program, or improvement of the educational process, is the second element that needs much more emphasis. Mere equalization of tax burden will not result automatically in improvement of educational programs. Among the factors to be considered in improvement are structural reorganization in relation to rational social and economic areas; improvement and balance in the instructional program, which is now generally low in the areas of health, fine arts and vocational education and much too weak in its close relationship to current cultural problems, and improvement in the quality of teaching personnel, in administrative organization and technics and in community relationships.

While the second group of problems has received some attention the equally important third, equalization of the economic ability of the individual to take advantage of educational opportunities, has been seriously neglected by the organized teaching profession. The reasons are not hard to discover. Education association programs are realistically built in too close relationship to campaigns for increased membership to admit of sensible idealism. Equalization of tax burden means increased revenue for certain areas. Increased revenue will permit both the employment of better trained teachers and increased salaries, essential parts of improvement in program. These improvements in the status of the teaching personnel permit the professional associations to point to their achievement in improving conditions and hence their claims for support. Equalization of individual economic capacity does not correlate closely with immediate teacher welfare.

The obvious need for providing means whereby children whose families economically are incapable of sending them to school is one of the most vital aspects of any program that really seeks to equalize educational opportunity. The provision for adequate and excellent educational facilities for the children of the United States becomes a hollow mockery when the fact is obvious that many hundred thousand children cannot avail themselves of these opportunities because of economic status. This problem must be faced and faced squarely by the teaching profession.

Credit for recognizing and making some attempts to solve this embarrassing situation belongs with the federal government. Under the emergency program, administered by the National Youth Administration, work scholarships have been provided for thousands of young men and women in secondary schools and in higher educational institutions.

The work of this administration in equalizing economic capacity so far as school attendance is concerned is vividly presented in a monograph entitled "The National Youth Administration," by Palmer O. Johnson and Oswald Harvey, recently published by the President's Advisory Committee on Education as one of its special studies. One of its significant findings is that $5 a month average wage from federal sources

makes it possible for approximately 250,000 boys and girls of high school age to remain in school who would otherwise have been forced out before completing their education. The report also brings to the attention of the people for the first time the social implications of this third area in the general problem of equalizing opportunity. It recommends that the state and federal governments recognize and accept this responsibility.

If the teaching profession and the people of the United States are really sincere in their desire to provide to all of the children democratic opportunity, in accordance with ability to profit therefrom, then too much publicity and discussion cannot be given to this problem.

Defective Roofs

THE recent accident at the high school at Clarksdale, Arizona, in which the roof over a second story auditorium sagged in the center and suddenly gave away while 100 children were studying, is another building accident that should be heavily publicized as a potent warning. The fact that no lives were lost, although 33 children were injured, was due more to luck than to vision. The auditorium happened to be equipped with study tables, enabling the children to crawl under them and thus avoid the full impact of the cave-in, which might have resulted in high fatality. The Arizona state department of public instruction has not yet issued a report of the specific reasons for the Clarksdale accident.

There is absolutely no reason for a roof falling in or for a building wall breaking. Safety in physical structure is possible if architectural and engineering services estimate accurately the stresses and strains involved and if the construction of the building is carefully supervised. Accidents of this nature occur when boards of education attempt to economize by cutting corners in building quality, when politics is present in the selection of the designers, when construction has been "skinned" by unscrupulous contractors or when defective materials have been passed by poor inspection.

The steadily growing list of preventable school plant accidents should make all boards of education and executive officers increasingly insistent upon complete safety in school buildings. There are no short cuts to building economy. The highest degree of economy can be achieved through intelligent educational designing so that the finished buildings may be efficiently used. Superior architectural and engineering service, rigid specifications for superior material, searching and continuous inspection of actual building construction offer the greatest constructional economy over any period of time. The use of inferior building material or equipment is bound to be expensive and costly in the long run. School buildings must provide complete safety for the children.

Totalitarian Philosophy

HERR HITLER announced late in the summer that, on Sept. 19, 1938, all sectarian and nonsectarian schools in what was formerly Austria would be closed and that the German state and the National Socialist Party would assume responsibility for the education of the youth. The number of nonsectarian and Protestant schools was small, and by far the largest number of voluntary educational institutions was under the control of the Roman Catholic Church.

An announcement by Joseph Bürckel, chief deputy administrator for Ostmark at Stuggart, on August 31, is of interest because of its philosophical assumptions. Herr Bürckel said in part: "We must take care of the preservation of our nation in this world. This only is possible if care is total care; therefore the school must belong to the State upon which devolves the responsibility for the future. . . . The State owns youth; the Church can act only in a secondary capacity in religious care."

This step taken by the Nazi government to control all processes of the education of youth is a natural one and completely consistent with the underlying philosophy of totalitarianism. It would have been of much greater significance, as an expression of policy, if the German State had not promulgated this plan.

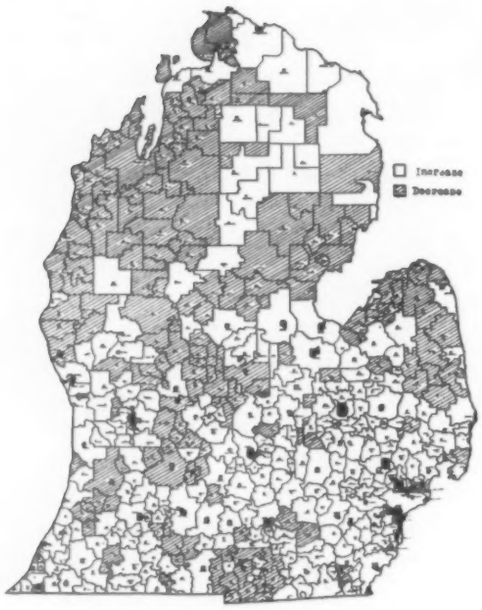
Such a policy would be extremely inconsistent, however, under a democratic organization of life. In the first place the individual does not belong to the State but has certain rights of his own in the determination of multiple allegiances; the parents exercise a natural and logical right over the education of their own children, and the State cannot be considered as the sole agency in control of educational processes. Under the American plan the State theoretically offers educational opportunity for all, but to the parents and, to some extent, to the child is left the choice of whether they desire to avail themselves of these opportunities or whether they prefer to dissent by selecting competing nonstate educational agencies.

The democratic State has no monopoly of education and should have none. One of the fundamental needs of democracy is for a system of strongly dissenting voluntary schools, subject only to normal controls in safety and competency of personnel. The strength of our voluntary agencies depends upon the degree to which they can maintain their freedom by remaining independent from government domination which inevitably follows governmental support and aid. The independent voluntary school as a competing agency on the field of education is one of the best safeguards that the people have developed for the perpetuation of democracy.

The Editor

School Districts of

J. F. THADEN



Left: School population of Michigan communities in 1935 as compared with 1915. The slanting lines mark areas in which population has decreased. Below: A view of the handsome new Fancher School, Mount Pleasant, Mich.

DESPITE the emphasis placed on the need for the structural reorganization of the traditional school district system and the years of effort expended, there still remain some 128,000 one room country schools and small school districts scattered throughout the nation.

The district is the unit of rural school administration in 21 states and in parts of four others. Most of these school districts are the result of legislation passed a century ago. The practice of subdividing townships into school districts, 2 miles square, was ideally suited to pioneer conditions. But modern youth justly demands a secondary education and opportunities for an integrated, wholesome personality. This the small district is unable to offer.

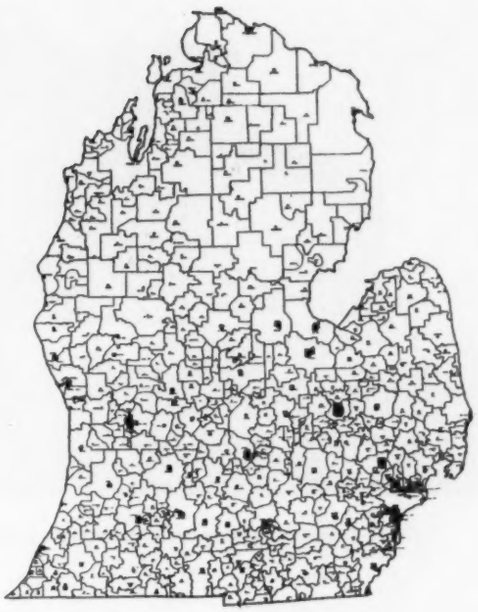
Reorganization of school districts on the basis of communities, instead of districts or neighborhoods, is a vital need in many states. There is a growing realization that villages, towns and cities, as centers of communities, are the logical centers for schools as they are for banks, libraries, hospitals, express offices, telephone exchanges, shops and stores.

A typical Michigan scene is this lighthouse marking some shoals at Sault Ste Marie.

Under the present organization, the state of Michigan is divided into 6671 school districts, each school district being responsible for the administration and maintenance of the primary and secondary school within its borders and subject to the general supervision of the state superintendent of public instruction and to certain state requirements.

As a consequence approximately 41,000 high school pupils in Michigan, mostly farm youth, migrate daily from 6138 school districts, which offer primarily elementary subjects, to 533 graded districts, which offer secondary school subjects. These pupils are commonly known as nonresident, or tuition,

Community Size



Map showing boundaries of high school communities in lower Michigan. The average high school serves its own community and also pupils of 12 other districts, while other schools serve as many as 50 districts in the near-by area.

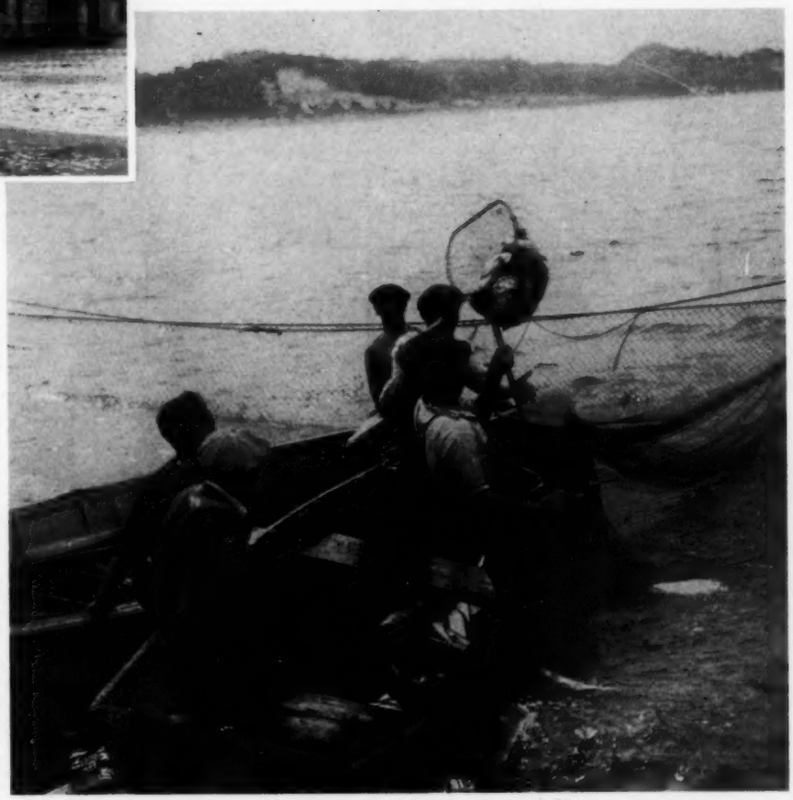
pupils. Their classmates frequently stigmatize them as strangers, aliens, outsiders and inferiors. A reorganization of school districts on the community basis would reduce the number of school districts from 6671 to about 533 and would result in many educational, social and economic advantages. An enlargement of the existing 12 grade districts to encompass the area already served would accomplish this.

In Michigan, school districts of one kind or another, most of them

primary districts, kept increasing in number until 1912, when they reached a maximum of 7362. Since that time they have decreased to 6671. However, the school district is not disappearing as fast as the oxcart, the spring wagon, the horse and buggy, the model-T Ford and other once common and essential means of transportation. During the nineteenth century the little district fulfilled its mission adequately and in some instances admirably. In those days when McGuffey's eighth grade reader was mastered, formal schooling usually ended. A few went to public high school in the distant city. But even as late as 1910 only about one-tenth of the youth of high school age were enrolled in high school as compared with approximately seven-tenths at present.

An elementary education once sufficed for all but a few; now a secondary education has become essential for the majority. The neighborhood school district has an area, valuation and population too small to offer courses on the secondary school level. However, these districts, cooperatively, can offer them.

Two tons of whitefish were taken from this net near Grand Haven.



Buses bring pupils from a number of districts to the Okemos School.

The development of high school communities was gradual. The first high school pupils were largely town youngsters. The farm boys and girls who attended came from the near-by farms. Farm youth kept coming into town to attend high school in growing numbers and from greater distances. The high school community gradually expanded until at present little or no interstitial area remains. Yet youth residing in 78 per cent of the land area of Michigan must go outside their own school districts to pursue a high school education. As a result of this cultural lag many farm children, capable and worthy of a secondary education, do not continue their schooling beyond the eighth grade. It partly explains why there are less farm children than city children attending school.

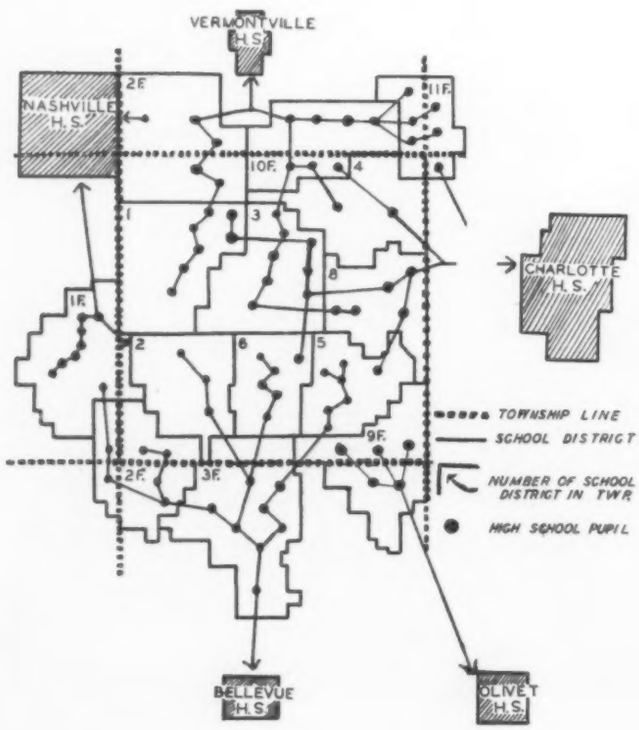
In Michigan, according to the census of 1930, less than one-third of the farm children 5 years of age are attending school, while slightly more than one-half of the city children are attending. Less than one-half of the farm boys and girls 16 and 17 years of age are attending school as compared with two-thirds of the urban youth. In every county the percentage of 15, 16, and 17 year old youth attending school is higher in the city than in the country.

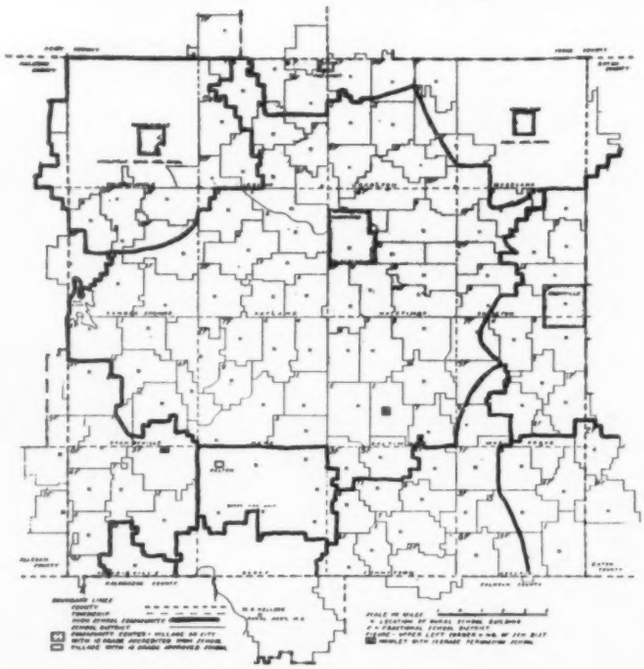
The high school community, like that of hardware, banking, clothing, medicine, grocery and other specific services, is a natural area in that it is not the result of legislation. Instead it has developed in response to certain definite geographic, economic, social and educational factors.

The local community is the natural habitat of modern man as a social being. The community may be defined as the people in that local area tributary to the center of their interests and activities where at least a majority of the people obtain their daily and weekly needs and wants. It is possible to map the area tributary to a community center served by its high school, its bank or banks, its churches and other institutions. The mapping of all basic services offered by all towns in five central Michigan counties was begun in 1926 and rechecked from time to time. It was found that the high school attendance area or community coincided more closely with the average of various services than any other single factor.

Mapping and analysis of the 533

Left: School districts in Kalamo Township, Eaton County, showing high schools attended by pupils. Below: Barry County's districts and high school areas.





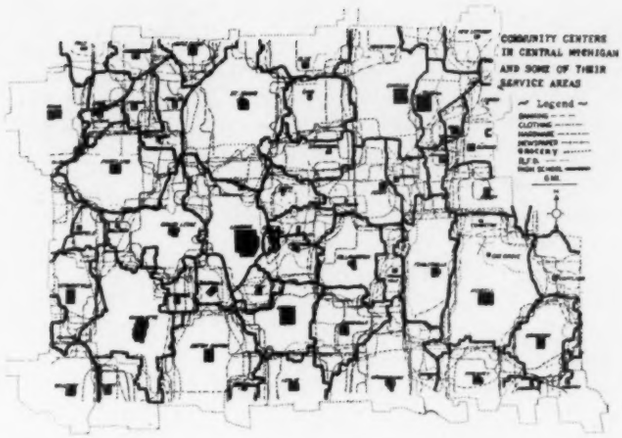
high school communities of Michigan were recently completed.[1] The first stage consisted of mapping the school districts. Up-to-date school district outline maps by townships were on file in the State Department of Public Instruction or in the offices of county school commissioners for only about one-half of the 1271 townships. The cooperation of hundreds of persons resulted in the eventual mapping of all districts.

The high school attendance areas were then determined from data on file in the office of the state superintendent of public instruction. Districts from which all high school tuition pupils went to a common school were regarded as a high school community. In about one-tenth of the districts pupils go to several high schools. In such instances the district was allocated approximately in proportion to the number of pupils going to the several high schools.

High school communities vary considerably in size and shape. Twenty-six of them comprise less than 10 square miles each, while six exceed 500 square miles each. They average 108 square miles, the equivalent of three townships.

The number of districts served by high schools varies. Fifty-seven high schools, most of them in the suburban areas of Detroit and other large cities, serve primarily the pupils in their own districts. The average high school, besides serving the youth from its own district, is also serving those from 12 other districts. Some serve more than 50 districts. Midland high school serves 53 districts, Hastings and Coldwater each serves 55, Battle Creek serves 57, Traverse City, 58, and Saginaw, 63.

The need for enlarged districts, therefore, is not limited to small towns. School electors in towns of all sizes may well consider expansion of their legal school boundaries in conformity with the territory the high school serves. From 1920 to 1931, 198 of the 461 high schools in lower Michigan were serving more pupils from outlying districts than from their own.



Map showing how the community centers are determined by population density.

The area of high school communities is closely associated with population density, diminishing gradually with increasing density of population. In the 12 counties with lowest density (under 10 persons per square mile) the areas of the communities average 258 square miles, while in the 13 most densely populated counties (100 or more persons per square mile), the areas of the communities average 60 square miles.

Since population tends to vary with soil fertility, communities tend to increase in size with decreasing amounts of marginal and submarginal farm land. According to Veatch's classification of land,[2] in the 20 counties having less than 5 per cent of first-class agricultural land, the high school communities average 201 square miles, while in the 19 counties with 55 per cent of agricultural land the high school communities average 64 square miles.

Population density and its trend are basic measurable factors affecting the area of communities. In lower Michigan 186 high school communities have a smaller school census population—5 to 19 years, inclusive—at present than they had 20 years ago, while 275 communities have a larger school-age population. Communities with shrinking population predominate in the northern part of the state where marginal and submarginal land is abundant. In the reorganization of units of school administration consideration may well be given to population trends.

School districts are no respecters of township or even of county boundaries. In lower Michigan 1784, or more than one-fourth of all districts, are fractional school districts, that is, they lie in two or more townships or counties. In some townships all districts are fractional and in many others the majority are fractional. In Calhoun County 65 of its 160 school districts are fractional ones.

Frame school buildings like this one in Wayne County are fast disappearing from the rural scene as reorganization of school districts proceeds.

[1]Thaden, J. F., and Mumford, Eben: High School Communities in Michigan, Special Bulletin 289, Michigan Agricultural Experiment Station, East Lansing (Jan.) 1938.

[2]Veatch, J. O.: Agricultural Land Classifications and Land Types, Special Bulletin 231, Michigan Agricultural Experiment Station, East Lansing (April) 1933.

Even less are high school communities respecters of township and county boundaries. Nearly one-half of the high school communities, 252 of the 533, cover parts of 2 or more counties; 51 cover parts of 3 counties, and at least 5 cover parts of 4 counties. This indicates the arbitrariness and artificiality of trying to make high school communities conform to political boundaries and shows clearly why townships and even county units of school administration, in spite of their many merits over the traditional system, have shortcomings.

Supt. Eugene Elliott in the 1936 Report of the Michigan State Superintendent of Public Instruction well expressed the situation when he said, "It is a matter of common knowledge that the artificial boundaries that were established by the surveyor's measure, when first Michigan was settled, are for the most part different from the natural communities in which people now work, transact their business and associate with one another. An educational community is frequently disintegrated and fractionalized because it is divided into small geographic units."

He therefore admonishes, "Where a school district, because of lack of resources, is no longer able to provide its children with the proper education, the welfare of the school should be placed above the continuation of an existing political unit, and above the personal interests of a few individuals who may profit, either by contract or stipend, from its continuation. Reorganization must proceed democratically and with full recognition of the partnership that exists between the schools and the people. Those who live in a community should have much to say about how the reorganization should proceed."

In the enlargement of graded school districts to correspond with prevailing community boundaries, all existing country school buildings need not be closed. The community school district may have several schools as does every large city school district. The transition of school administration from the small neighborhood to the community facilitates the solving of many educational and economic problems, such as the simplification of the apportionment of state aid, the greater equalization of school tax burdens and of educational opportunity and the provision of expert leadership.

Generally speaking, community school districts mean enriched curriculums, balanced teaching loads, more training for the teachers of specialized subjects and greater attention to the pupils' need.

Married Women as Teachers

HENRY A. WISE

"SHOULD married women teach?" This is one of the numerous questions that have been discussed indefinitely and that, despite all discussion, have never been answered satisfactorily. Perhaps, after all, it narrows itself down to whether you like your steak rare or well done. That is, it is largely what the individual superintendent and the individual school board think about it.

Most discussions concerning this question, as was the one published in last month's issue of The NATION'S SCHOOLS, seem to be based on the hypothesis that married women are always better teachers or that only the best teachers in any system get married. Neither of these hypotheses is correct.

Many of us know married women who are only average teachers, and I suspect there are married women teaching who, like some other teachers, are a little below the average. Of course, there are some married women who are far above the average teacher in personality, in classroom management, in stimulating pupils, in imparting knowledge and in all things that relate to teaching. but there also are some unmarried teachers who rate the same way.

To say that married women make better teachers is like many other broad statements: it is so very broad that it has no meaning whatever. It apparently implies that the mere fact of marriage makes her a better teacher; it implies that there is something in marriage itself that will change a mediocre teacher into a good teacher, for one must acknowledge that mediocre persons commit matrimony as well as the unusually intelligent.

It is not, then, the question of marriage that makes the teacher. The successful teacher will do just as well, but perhaps no better, after marriage than she did before marriage. The unsuccessful teacher will be, I think, a little more unsuccessful. It was taking all that she had to "keep going" before she married, and marriage, with its added interests and responsibilities, coupled with the responsibilities of the classroom, prove just a little too much for her.

Another phase of the married teacher problem is one that we do not often discuss. Marriage implies, or should, if it be marriage in the right sense of the word, a home and children. Becoming a mother and teaching children somehow do not go together. A substitute teacher for several months of the session is not the best thing for a class, and later the new mother hires someone else to take care of her child while she is being hired to take care of the children of someone else.

The regulation that women teachers resign when they marry often saves a superintendent the embarrassment of requesting a teacher to resign some time after she marries in order to save further embarrassment in the classroom.

No matter how good a teacher or how good a worker, there is always another teacher or another worker who can do the job just as well and sometimes better. If this were not so, the work of the world would stop. One interesting phase of the superintendent's work is discovering possibilities in teachers and taking beginning teachers and helping them develop into teachers far better than some of those whose places they are filling. If all women continued teaching after they married, what an opportunity the superintendent would be missing!

High Life in High School

ELMER A. HABEL

ARE our public schools doing anything to equip young people with those fundamental abilities known as social graces? Are the private schools doing more in this respect than the public schools?

Tentative answers to these questions were obtained by a personal survey of 27 public and private high schools in a leading eastern city. The public school is, today, accomplishing results in its efforts to socialize its tremendous population. However, the private school is out in front in that it reaches every pupil uniformly with every phase of its program, including the social, while the public school leads in the variety and extent of its program for the development of social abilities.

Sight of a mammoth, complex, modern school plant creates the impression of a factory grinding out stereotyped products in a mechanical way. But not so! Most principals and teachers are aware that they are dealing with personalities, that the personal value is a most sacred one in education and that it must be given increasing attention. The individual is not lost in the modern school; its aim is to reach him intimately.

Freshmen Sponsors

The alert principal has many ingenious devices for establishing and maintaining that intimate contact. To facilitate the adjustment of new pupils, many schools today are appointing an older pupil as sponsor for each freshman. During the first days of school the sponsor takes charge of the freshman, explains the plan of the building, points out the location of the different rooms, takes the new pupil to lunch and introduces him to others. If a pupil enters late, a hospitality committee meets him and aids in his orientation. For a pupil who finds any subject too much for him, some schools supply a volunteer pupil coach or tutor as long as is necessary.

Frequently pupils cannot dance but wish to learn so that they can attend school functions. Usually they may have the aid of several school agencies, including a beginners' dancing club, the Girl Reserves, the student council or physical education classes. In the survey, physical education classes were found to be the most popular means of dance instruction. A dancing club is second, but it is just half as popular as physical education classes, which also give instruction in esthetic dancing.

Dances are a part of the regular programs at nearly every school visited. At least an annual dance is given by each of the schools' organizations. Often some group such as the student council sponsors dances at lunch period, charges 5 cents admission and hires the school orchestra to play.

Some school dances are given in the afternoon, again with the school orchestra playing; more frequently orchestras from outside are hired for night affairs, which occasionally are formal, with evening gowns, tuxedoes and a stray tail or two.

Dances are not by any means the only social functions; others include parties, banquets, suppers, teas, picnics and movies. Probably the most interesting of these are the movies. A few schools show pictures at lunch time, some every day and some irregularly, some with paid admissions and some free. At several schools the equipment is used only at lunch periods on stormy days, while others show amusement films after school hours.

A business man's views of high school social life are expressed after personal survey of 27 public and private high schools in a leading Eastern city

More often, however, the films are either educational or advertising pictures, distributed by commercial or philanthropic organizations. According to the school principals, the commercial films are worthy mediums for conveying desirable information to the pupils, since the advertising is neither obnoxious nor too much in evidence and the material is attractively presented.

Parties are not so popular with the older pupils, although some senior high school dances have rooms adjoining where ping-pong, monopoly, and other games are played. The homeroom during school hours is the scene of most parties. The junior high schools use the homeroom parties for teaching the social amenities and etiquette.

Other Clubs Are Popular

Clubs, besides the dancing clubs, serve no little part in a social way, as the following list of unusual clubs indicates: (1) games' and parties' club, (2) etiquette club, (3) chess and checkers' club, (4) personality club, (5) sportsmanship club.

Most schools thoroughly appreciate the significance of games in the social education of the young person; all attempt to have every pupil playing on an athletic team. One physical education director has every pupil in the school competing on at least one of the various teams.

He did not follow the policy of so many schools, that of lionizing the few boys on the varsity to the neglect of the majority. If a visitor enters the gymnasium immediately after school, he will find that four homeroom teams are playing two regularly scheduled games in a tournament and that four more teams are waiting to play. Varsity men either referee the games or wait while the others finish.

Libraries Play Leading Rôle

C. H. PYGMAN

THE libraries are fast becoming the cultural center of the schools in district No. 89 (Maywood, Melrose Park and Broadview), Cook County, Illinois. They offer a pleasant environment in which children spend many interesting and profitable hours and are attractive rooms that lend themselves as a convenient meeting place for the parent-teacher associations and similar groups. School librarians frequently hold teas in the library and parents who attend view the many projects on display.

Much is made of Book Week. Sometimes a book play is written and produced in the form of an operetta, the entire school helping in the production, the art department designing the stage sets and costumes, the music department helping with the songs and the literature classes helping with the script. Often as many as 200 children are in the cast. An admission fee is charged and the proceeds used to buy more books for the library.

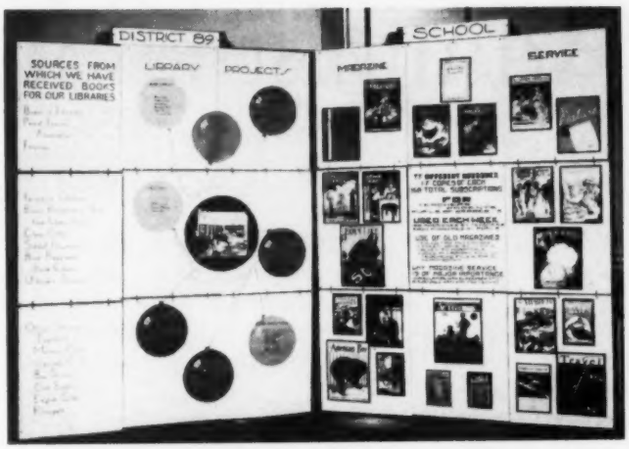
Parent-teacher associations are fully aware of the value of the library and often make donations for the purchase of books. The board of education includes in its annual budget an item for library books and supplies.

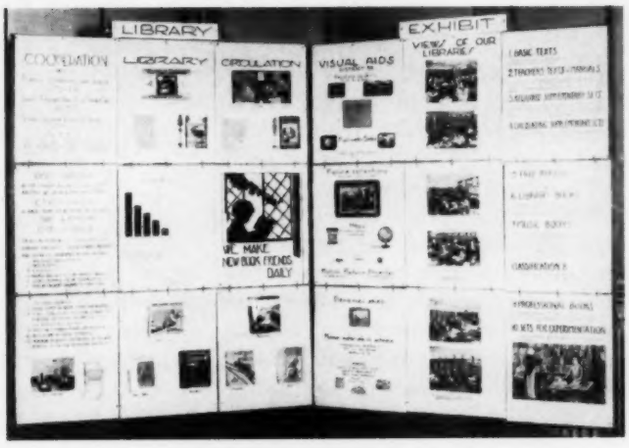
Whenever a librarian, with the help of the principal and teachers, purchases new books, these are put on display at the P.-T.A. meetings and at the meetings of child study groups. Librarians are often called upon to speak before these groups and they use the opportunity to explain the function of the library. At the Christmas season librarians send to parents approved lists of books for children of different ages as suggestions for book gifts.

In most of our schools pupils from first grade to the eighth spend some time in the library. The upper grades have more frequent library periods while the primary grades may have one period every two weeks. A library grade for proper library attitude, conduct and worthwhile work is put on the report card of all children from grades 4 to 8. Librarians encourage the children to take out cards in the children's department of the public library.

At a recent district conference of the parent-teacher associations held in Maywood, our libraries were the main feature of the displays. Interested visitors from other districts and our own patrons asked many questions concerning the library work. The same displays were taken to the Maywood public library where they were viewed by the hundreds of parents who visited the library during Book Week.

Displays of old books, community newspapers and old pictures of the community are often featured in the libraries. Parents take great interest in such projects, sending in items of interest and coming out to view the displays.





Above: Library displays that arouse community interest. Opposite page and below: Pupils from the first through the eighth grades spend part of their time in the school libraries, which have become real cultural centers.

Service clubs and women's clubs are sometimes invited to hold their luncheon meetings in the school and committees of women from the parent-teacher associations prepare the luncheon in the school kitchen. Instead of having a speaker the club is divided into small groups and, under the leadership of the school principal, is taken on a tour of the building. On these tours the library is given its full share of time.

On these tours and in the principals' and librarians' talks to parent groups an attempt is made to interpret the use and function of the library. The many services that the full-time librarians give to children and teachers are explained. Attention is called to the number of volumes of reference and fiction, children's magazines, teachers' professional magazines, circulation reports, number of children having public library cards, the card catalog, projects and the picture file (compiled by teacher and pupil committees and containing hundreds of pictures on various subjects).

The librarians' services in obtaining supplementary sets of books from the district central library of 8000 volumes, in obtaining for teachers books from the district central professional library of 450 volumes and in distributing to teachers visual aids, such as slides, films, classroom teaching visual units, stereographs and other teaching devices also are explained.

Through it all runs the dominant theme of enlarging the child's world by the use of books and visual aids and endowing him with a desire to read good literature. Parents realize the part our libraries play in the children's lives. Consequently, when the depression with its drastic retrenchments came, our full-time librarians were retained and instead of curtailment our libraries actually increased their lending facilities.

Administration

JAMES M.

THE prerequisites for teacher participation in administration are (1) a teaching body with a sound core that is professionally minded and professionally ambitious; (2) a superintendent who recognizes his own limitations and believes that a few mistakes are better than stagnation; (3) principals and supervisory staff who accept and can practice leadership as opposed to domination; (4) a board of education with confidence in the superintendent, his philosophy and procedures, and (5) a clear recognition as to where ultimate responsibility, and hence authority, resides.

Given these fundamentals most superintendents will hold that courses in administration are not necessary to teacher participation. It has been implied that teachers should be restrained from administrative participation until they have qualified through regular credit courses in administration. Like most of the 28 superintendents whose opinions I obtained on this question, I hold that courses are desirable but ought not to be prerequisite to contributions which can be made without them.

Administrative courses may preach wisdom and balance but they cannot instill these qualities. They are needed and there should be a premium on them but they should not be required of teachers as prerequisite to participation which goes beyond the classroom.

Important to Teacher Prestige

If the teachers in a school system are well selected there will be a fair proportion whose natural good sense and proper ambition have led them to take courses in administration. Their influence will be felt even before they are singled out for administrative posts. If they are to remain as teachers, they will continue to give strong administrative aid without portfolio. If they accept so-called promotion, others of their kind will be coming on and will replace them.

When teachers are well chosen there will be a fair proportion lacking administrative courses who have the natural good sense and ability to make genuine contributions of the administrative type.

Many teachers, because of absorption in classroom procedures or because of temperamental limitations, will understand and function in administrative ways only to a limited extent. They will feel that it is the administrator's job to keep them free for what they conceive to be their sole function. Let the administrator do his own dirty work, say they, which is to protect them from politicians, pressure groups and parents. But some small degree of sharing, even when unwelcome to a particular teacher, is important to his prestige and power of adjustment.

Policy Forming *v.* Administration

Even recalcitrant teachers are often right in certain respects and if their number is large, a realistic view suggests that administrative policies need reexamination. For teachers of this stamp some challenge to participation in administrative policies is as much of a challenge as any challenge. If they have had opportunity and failed to make a constructive contribution, the opposition will probably remain silent or less heeded.

Professor Kilpatrick easily distinguishes between policy forming and administration *per se*. He would have teacher councils help in the formation of policies and then let administrators administer them. Yet most of us talk about administrative policy and in practice we are continually confused between administration and policy.

Rare or nonexistent is the school board that knows the difference between policy forming and administration. One frequently shades off into the other.

Participation in administration has a broad interpretation. For the teacher it may consist of: (1) helping to form administrative policies; (2) special assignments in carrying out those policies that do not rest equally on all teachers in the same field or grade, and (3) interpretation of those policies to other teachers or to the public.

The teacher's interest in policies having to do with conditions of employment is generally best effected through teacher delegates or committees selected by teacher organizations. The opportunity to present requests and to suggest procedures relative to employment conditions can hardly be defined as participation in administration. It is a necessary and desirable part of any employer-employe relationship. Final determination must rest with the board of education. As the executive officer of the board, the superintendent naturally and inevitably becomes a mediating force in negotiations. If he does not, he may become flour between two abrading surfaces.

Common Forms of Participation

The policy once determined, its application to individual cases becomes a matter for the superintendent. Whether individual grievances shall be heard by the superintendent or by a council depends largely on the size of the system. But no council can have more than delegated or advisory powers without splitting administration and inviting chaos.

The most common forms of teacher participation are committee service in curriculum revision and textbook selection. It is doubtful whether delegation of responsibility here is really participation in administration. Because of the nature of curriculum revision, administrators cannot do this work alone. They may delegate it to the supervisory staff without any teacher representation. But whether curriculum-making is called administration or not, it cannot be done without the knowledge and experience that are to be found only among practicing class-

Without Portfolio

SPINNING

room teachers, any more than curriculum changes can be made effective without them. Teachers must understand and accept the purpose and spirit of the change if it is to function.

Testing programs, too, while they may be inaugurated by the administration are classroom functions and the teacher's participation therein can hardly be called an administrative exercise. The same is true with regard to text selection. The function is administrative so far as setting up procedures for their selection is concerned. It is doubtful, however, if the survey and recommendation of texts to fit classroom situations are a matter for administrators. Certainly they can not do a good job alone.

If there is an open textbook list the selection of particular texts for particular schools and particular classes becomes an opportunity for teacher participation. The same is true of modifications of courses of study and testing programs for the individual school or class.

The teacher's part in these procedures gives a sense of sharing. It is some small part of the answer to the plaint of the teacher who didn't want to think of herself as "just a clog in a machine."

The part the teacher plays in contacting parents and the public generally during American Education Week and in meeting local speaking engagements broadens his understanding of the school system and of its administrative problems. Nor can one speak too emphatically of the understanding gained through exchange teacher arrangements with its interpretation of the home school system and, on return, of the host school system.

In my teaching experience the following were matters for consultation with teachers or for teacher committees: the form of report card, the form of permanent records, the selection of schoolroom supplies, classroom design, type of classroom seating, regulations for library use, disciplinary policies, corridor and grounds supervision, club sponsorship, athletic program, homeroom guidance program, assembly programs and various teacher rating schemes.

Every faculty meeting and every department meeting were occasions for suggestions, committee appointments and committee reports. They were town meetings in which individual school policies were determined, the principal confirming whatever seemed practicable and sound, reserving the right, after further conference, to make changes in the interest of efficiency but issuing no ukases and no decisions until corporate wisdom and opinion had been invoked.

New procedures were regarded as experimental until experience had confirmed their soundness. It was out of such local school experience that city-wide procedures and policies developed. Is that teacher participation? Or is it administrative participation in teaching?

An honest effort is being made in a number of school systems to have the teachers participate in general administrative policy. Superintendent Spinning of Rochester, N. Y., writes on the differences between policy forming and administrative functions and cites instances of this extension of democratic principles

Whatever it is, most school systems operate in that way and the most potent factor in helping them to operate in that way lies in the tact, the good judgment, the open-mindedness, the objectivity of the principal, his ability to keep service to boys and girls as the great objective and his ability to keep these qualities and ideals potent in his faculty.

In most school systems the superintendent works on the theory that the teacher's view will be expressed through the principal. Sometimes the problem becomes how to have it expressed in spite of the principal. It makes no difference how democratic the superintendent may be if there is petty authoritarianism on the part of principals or supervisors.

What Some Systems Are Doing

The initiation of the larger policies in school systems frequently rests with administrative and supervisory officers. Many hold that it must inevitably be so; there are even those who claim that teachers are interested in nothing beyond their salaries. I have not found that the case, although conditions differ widely; there are differing backgrounds. In the past politics and lack of professional leadership may have left a live paw and a dead hand on a whole school community so that better ways take a generation to develop.

Unfortunate experiences in such situations make the administrator hesitate to widen the sharing of authority. He may wish to develop greater participation but he knows that if it is not successful a worse administrator may come in his place. Temporarily, he reasons, a feudal type of control must operate in the interests of the present generation. Each situation has its particular difficulties.

But there are large school systems in which councils on general administrative policy are not confined to staff and line officers but include classroom teachers in their personnel. Among these systems are Denver, Des Moines, Washington, Seattle, Salt Lake City and San Francisco. In many other systems the executive committee of a teacher organization

or group of affiliated teachers' organizations functions as a superintendent's council on general administrative policies as well as with respect to salary matters.

For example, the Denver policies council, an extension of the curriculum committee, has 175 members, including all principals and supervisors and a larger number of classroom teachers.

This might seem an unwieldy group. But it has as subsidiary two proposal committees, one for curriculum and one for general administrative policies. A proposal from one of these committees, having been accepted by the council, is referred to a subcommittee for study and back to the council for report and action. If adopted, it goes to the superintendent for ratification.

Seattle not only arranges for the superintendent to meet a teachers' interest committee from all the professional organizations but has regular sessions of such groups at which suggestions and questions are directly received by the superintendent and instantly answered or referred to the proper staff officer or committee for study and report. Especially significant is the provision for evening professional courses for teachers, including such administrative courses as public school finance. Credits earned in these courses provided by the school system are counted toward special salary increments. This plan gives concrete expression to the superintendent's thesis that teachers should be led rather than required to study administrative problems.

In Washington, D. C., the teachers' council includes representation for all classes of employes. It is an instrument for professional study as well as teacher interest. In its constitution it delimits its own functions by reminding itself that it should be an advisory and not an administrative body. "It should realize that it is not to usurp the prerogatives of the board or of the superintendent. It should not be a body for merely destructive criticism." Among its constructive services is the maintenance of a teacher institute which provides speakers on professional subjects.

It is the custom in Salt Lake City to devote a whole institute program each semester to teachers' personnel problems sorted out in advance by a committee which places them before the superintendent.

A curriculum forum managed in the same way gives opportunity to groups of 30 to 40 Atlanta teachers to make curriculum suggestions.

Des Moines has a committee of 19 teachers, including one principal, to work with the superintendent in making recommendations to the board of education.

In each one of these situations an honest effort is being made to mitigate the undeniably hierarchic organization of the American school system by a liberal extension of democratic principles. In countless others the open-door principal and the open-door superintendent lead to a mutual understanding as between teacher and administrator, which gives the same effect.

When the superintendent tells you so, it may be wishful thinking. When teachers tell their superintendents so, it may be apple polishing. But when teachers tell this to people from a distance, I think the statement may be given face value.

Teachers generally respect the responsibilities of administration. They do not envy the superintendent his headaches, but they want him to be sympathetically aware of theirs. We all like at times to reduce our boiler pressure by pulling the whistle cord.

Negro Children Are Handicapped

GARNET C. WILKINSON

MORE rapidly in education than in any other area of human endeavor the Negro has made progress within the last two generations.

Much of this progress is due to the fact that the attitude of the South on the education of the Negro has been steadily changing for the better through the years. Throughout the South today the general tendency with reference to common schools for Negroes is to improve facilities, to exercise more helpful and efficient supervision, to establish vital connection between school work and the activities of the people served and to project the influence of the schools into community life.

To conclude that there are no present serious problems in the education of Negro children would, however, be a fatal mistake. There is yet an immediate and persistent need for more education, for better education and for higher education among Negro children in this country. This need is strikingly revealed by the following facts:

1. The educational opportunities offered Negro children in rural communities are lacking in adequacy and the educational facilities provided for them in these areas in the main are difficult of access.

2. Approximately 16 per cent of the Negro population 10 or more years old is unable to read and write.

3. There is lack of appropriate emphasis upon commercial training and guidance in the educational program provided for Negro children.

4. Facilities available for the professional training and preparation of teachers of Negro children are altogether inadequate.

5. There is convincing evidence of inequitable distribution between racial groups of public funds for the support of education.

The facts eloquently bespeak the need for more interest in the educational welfare of Negroes.

Reasonably interpreted these findings mean that America has not yet established equality of educational opportunity for all her children.

The educational system provided for Negroes in this country fails in an important particular, in not placing due emphasis upon commercial education for colored youth; in failing to provide for them fundamental training in the study of actual business. The number of successful small businesses owned and operated by Negroes is entirely too small. Certain it is that too few Negroes engaged in business are properly, adequately and purposely trained in business methods, procedures, and management.

"Better Speech" Story

OLLIE BACKUS

If one specialist in speech in a town of 23,000 was able to decrease the percentage of school children with defective speech from 18.1 to 3.6 in two years, what could a program of speech improvement do for all children in a school system? This is the challenge here presented by the chairman of the department of speech at State Teachers College, Slippery Rock, Pa.

RELIABLE surveys indicate that from 8 to 20 per cent of all school children have noticeably defective speech. There is still a larger percentage of children whose speech is generally considered normal but who have unpleasant voices, poor diction or the inability to express themselves easily and clearly. The latter group probably would include about half of the entire school population.

While classes in corrective speech have been in existence for some time, many school systems have failed to make provision for such instruction. How a program of speech improvement can function successfully even in schools having limited financial resources is illustrated by the results of a speech education program given in an elementary school system during a two year period.

This school system is in a midwestern industrial city having a population of 23,000, which includes a large percentage of unskilled labor. The city had 11 elementary schools, including kindergarten through the sixth grade, and an enrollment of 3270 children. There was a staff of 93 teachers, nine teaching principals, one supervising principal and one specialist in speech.

The original setup on the basis of diagnosis before the two year training period was instituted is shown in table 1.

The descriptive classification of speech defects in table 1, which is based on causes, differs from that ordinarily used by specialists in speech. In dealing with parents and teachers, this classification is more easily understood than the usual academic terminology. It should be noted, further, in table 1 that the sum of defects in any one grade does not equal the total number of children, since in many instances one child had more than one type of defect. The decrease in number of cases in the upper grades was probably due in part to increasing maturity and to previous speech training. Formerly, the major emphasis in speech training had been on the upper grades.

It is obvious that a case load of 592 pupils could not be handled adequately during the school year by one special teacher. Therefore, the children in the kindergarten were chosen as the primary area of concentration. Each kindergarten child having defective speech received individual instruction three times a week. As soon as that child had learned to speak correctly, his special training in the clinic was discontinued; he then was placed under close supervision of his teacher and periodic checkups were made by the specialist.

Gradually individual instruction was extended to first grade pupils and by the end of the first year special training had been given to children in all of the elementary grades. The periods of instruction varied with the severity of the particular case and the efforts of the child himself, although many of the children were taught to speak normally in two weeks. This does not mean that all of the speech defects were so quickly and completely corrected but that the fundamental knowledge and skill in forming the correct sounds were given to each child by the specialist. After receiving the preliminary training, the children were considered as potentially corrected cases. The subsequent drill to form correct habits of speech was carried on as a cooperative program in which teachers, parents and the children themselves participated.

The actual results obtained from the program after a two year period

Table 1—Classification of Speech Defects by Grades

Types of Defects	*Kindergarten*	*Grades* 1	2	3	4	5	6	*Total*
Lisp	41	55	54	19	22	13	14	218
Lateral lisp	3	6	3	6	3	2	4	27
Sound substitution	82	92	38	23	12	6	8	261
Indistinct	5	1	3	10	24	1	25	69
Nasal	...	...	...	...	...	2	1	3
Stuttering	4	4	...	4	2	4	4	22
Foreign accent	3	4	3	1	5	3	5	24
Cleft palate	...	1	...	2	...	1	...	4
Scanning	...	...	...	...	...	1	1	2
Total with defects	127	151	99	62	65	31	57	592
Percentage with defects	24.6	34.2	19.9	13.2	14.6	6.9	12.4	18.1
Total enrollment	516	441	496	468	443	449	457	3270

Table 2—Classification of Defects According to Progress After Two Year Program

Type of Defect	*Corrected*	*Associate*	*Active*	*Removed*	*Died*	*Dismissed Incurable*	*Total*
Lisp	117	67	34	20	...	...	238
Lateral lisp	6	14	7	2	...	...	29
Sound substitution	143	58	60	16	...	4	281
Indistinct	66	1	2	11	...	...	80
Nasal	2	...	1	...	...	3	6
Stutter	3	3	16	1	...	...	23
Foreign accent	12	10	2	1	1	...	26
Cleft palate	...	...	4	...	1	...	5
Scanning	...	...	2	...	...	...	2
Total defects	349	153	128	51	2	7	690
Total children	336	138	118	49	2	7	650

are shown by the following tables and graph. Three terms have been used to indicate degrees of progress. If a child has been classified as "corrected," he knows how to speak normally in all speaking situations and needs no further supervision or checkup. If a child has been classified as "associate," his speech problem is potentially corrected; he can speak normally in the clinic and needs no more individual instruction, but requires close supervision by teachers and parents to make his newly acquired speech patterns habitual. If a child has been classified as "active," he has not yet learned how to speak normally and needs more individual instruction.

The original classification by grades was affected by the annual promotion. Thus, kindergarten children not attending when the program was initiated are included in the second year of the period. Likewise, one sixth grade had been promoted to the junior high schools. The latter group has been designated as "removed" in table 2, although the children in this group had received instruction in speech and most of them could have been classified as "corrected."

Most cases of indistinct speech required little training because they were caused by carelessness. The follow-up work of the teachers through constant emphasis upon distinct speech in the classroom was chiefly responsible for improvement in these cases. Specific help by the specialist in speech was given only upon request of the teacher. The cases of "corrected" and "associate" stuttering were in young children. The prognosis for stuttering in older children is not as favorable as for the younger. The four "active" cases of cleft palate could make all of the speech sounds normally but needed continuous help because of nasality.

The two cases of scanning speech were the result of paralysis. The prognosis is not favorable for such cases but it was recommended that the two children continue to receive all possible help. The cases listed as "nasal" were extreme cases. Many cases of partial nasality were not given treatment because of the size of the case load.

From table 3 it is clear that 336 of the original 592 cases had been entirely corrected within the two year period. The 138 "associate" cases were at that time potentially corrected. Granted an average amount of parent and child cooperation during the ensuing summer vacation, all of these cases should have been entirely corrected by the following fall. Thus the 118 "active" cases are the only remaining pupils needing further instruction in the clinic.

Table 1 shows that the 592 children with defective speech constituted 18.1 per cent of the entire school population. Table 3 shows that the 118 children with speech defects, remaining after the two year period, constituted only 3.6 per cent of the entire school population.

An analysis of the 118 "active" cases shows that two-thirds of this number were in the kindergarten. This results from the fact that not as much time was spent in training kindergarten children the second year as in previous years. Furthermore, since they had been in school only nine months, not enough time had elapsed to make sure that they were adopting the new speech habits in their conversation outside the clinic. It may be safely assumed that many of these children did improve greatly during the summer months merely by the process of physical and mental maturation. At the end of the two year period there were only 39 children above the kindergarten level who needed more instruction in the clinic.

A comparison of the original and the active cases in table 3 shows that, whereas at the beginning of the training period there were many speech cases throughout the elementary schools, the problem was finally confined chiefly to the kindergarten and first grade. This indicates that it should be possible, with the exception of a few severe cases, for every child to enter the second grade with comparatively normal speech. The effect of this upon individual success in the acquisition of reading and spelling is obvious.

If one specialist in speech with the cooperative effort of teachers, parents and children was able to decrease the percentage of children with speech deficiencies from 18.1 to 3.6 in two years, one gets a vision of what a program of speech improvement could do for all of the children in a school system, with comparatively little additional effort and expense.

Table 3—Classification by Grades According to Progress After Two Years

Grade	*Original Cases*	*Corrected*	*Associate*	*Active*	*Total Enrollment*	*Per Cent Defects Left for Further Work*
Kindergarten	127	20	28	79	516	15.3
1	151	102	32	17	441	3.9
2	99	71	25	3	496	.6
3	62	35	21	6	468	1.2
4	65	50	13	2	443	.4
5	31	16	7	8	449	1.7
6	57	42	12	3	457	.6
Total	592	336	138	118	3270	23.6

It is significant that the children who had been trained in speech re-education in most cases surpassed the children who had not received the benefit of this instruction.

Teachers and parents, as well as the children themselves, soon realized the difference. Requests came in for the speech clinic to enlarge its sphere of activity. As the number of defective cases decreased, additional service by the speech teacher became possible. The speech program no longer was designed for the comparatively few unfortunate pupils, but for everyone. The specialist in speech finally became what might be termed a supervisory teacher, with the training of children being carried on in the classroom.

This expansion began gradually in the second year. The plan evolved that year, therefore, differed in some essentials from that of the previous months. A study of "better speech" was incorporated in the language courses. The supervisory speech teacher visited each grade and talked to the children about ways in which they might improve their speech. The teachers felt that this motivation was helpful. Children who did not show improvement readily were sent to the clinic for special drill. Many of those who showed the most improvement were sent at their own request because they wished to report progress.

The better teachers, realizing that oral recitation in the school program had been slighted, planned more opportunities for the children to use oral speech in the classroom. The speech teacher was invited to make periodic visits to the various rooms when special work was being presented before the group. She also was asked to assist at rehearsals for special programs. Attention was given to good speech as well as to the selection of children who had previously had little or no opportunity to take part in public performances. Special programs were developed for P.-T.A. and mothers' club groups. At the end of the second year, special objectives and standards for various age levels were being set up and worked out with the teachers cooperating as to detail.

The benefits of specialized speech training do not all accrue to the children. While it is true that some of the teachers never caught the vision, nevertheless, those with a modern professional outlook were quick to realize that the speech clinic should increase the efficiency of the teacher in her twofold job of raising the level of achievement in academic work and of aiding the children to develop as socially adequate members of society. Thus they welcomed the aid of a specialist in speech on problems that they had neither the time nor the technical training to solve effectively without help.

The program caused the teachers to become conscious and concerned regarding their own speech habits. Furthermore, the remedial progress in speech actually resulted in active support of the schools by parents.

Speech is a recognized fundamental prerequisite to satisfactory living. Defective speech hampers the individual in his social relations, sometimes causing him to develop serious personality characteristics. The avowed purpose of the school is to develop children for useful citizenship. When so many children are handicapped by speech defects that can be recognized and corrected with so little effort, it should be evident that no school can afford to deny speech training to its pupils.

Although in many systems more than one special teacher would be desirable, such a program has been successfully worked out with only one teacher. It is conceivable that with smaller school systems one supervisory teacher could serve more than one system or possibly do county-wide work. There is no reason why rural children should be deprived of this service.

Movies That Distribute Ideas

EDGAR DALE

WE OUGHT not to turn away from reading as a major technic for the distribution of ideas. But before reading is going to achieve its full possibilities, we must either greatly improve reading abilities or greatly simplify the material.

The motion picture is less abstract, less symbolic, more easily understood than written symbols. Through the concrete experience afforded by motion pictures we can go far to eliminate the verbalistic quality of much current education. The sound motion picture, through the use of the method of drama, can warm up problems that are often intellectually cold.

Research has shown us that theatrical motion pictures do influence the attitude of high school pupils.

Through the motion picture's power to influence emotions and attitudes, we can sensitize our boys and girls to the need for better housing, to the need for better care of juvenile delinquents, to the need for an extension of public health work and health insurance, to the need for vocational and occupational guidance, to more tolerant feelings toward various races and nationalities. In this connection let us make haste to use the motion picture to develop the motivations necessary for living intelligently and cooperatively in a democratic nation.

The school does have certain specialized objectives that aim to make experience in the field of geography, biology, mathematics and the like more illuminating to the pupils. The motion picture has unique value in clarifying certain experiences in these fields.

The sound film has a special contribution to make to the field of sciences. Its greatest contribution is to show to all the members of the class at the same time microscopic materials that are too small to be seen by the naked eye.

Can we afford this educational device? How can we pay for equipment and films? As a matter of fact, we are already paying for it, in part, by continuing an ineffective educational program that does not achieve the objectives set up for it. We can usually find money to pay for those things that are valuable. Tax funds may be used in some cases, school money making projects in others.

Evaluating the

By WALTER

MORE than 27,000 secondary schools are found in the United States. Of these more than 6000 are members of the six regional associations of colleges and secondary schools. Membership means that schools have met certain definite standards for admission which presumably mark them as somewhat superior to the nonmember schools.

In general the achievement of these standards for accreditation or admission has resulted in a distinct improvement of the quality of secondary education throughout the country during the past quarter of a century. Increasingly in the past few years, however, these standards have been so defined and administered as to raise some doubt as to their validity and appropriateness for the modern secondary school.

This doubt has arisen in the minds of those most closely connected with their use. It has come from their friends rather than from their enemies. Leaders in secondary education have come to feel more and more that the existing standards are narrowly academic, mechanical, inflexible, nonstimulating and unscientific in character.

In view of these limitations, representatives of the six regional associations which cover the country—the New England, Middle States, North Central, Southern, Northwest and Western associations—met five years ago and organized a concerted attack on the problem. They decided that the schools, like the adolescents they are designed to educate, had outgrown their clothes. They decided further that it was futile to attempt to patch and enlarge and make over but that entirely new and up-to-date suits of clothes needed to be constructed to fit the needs of the modern secondary school, ones that would be in keeping with American educational styles, ideals and practices today.

They organized the Cooperative Study of Secondary School Standards, composed of 21 representatives of the regional associations and a half dozen advisory members from other organizations, and instructed an executive committee of nine members to obtain the services of a group of educational tailors who could be depended upon to design new clothes on modern scientific principles, try them out on a varied group of schools, and after due care and revision offer them to the educational world for widespread use.

This group of educational tailors has now almost completed its work. A few improvements still remain to be made but the principal characteristics of its new patterns are now formulated and are available to the educational public this fall with full instructions for use.

Criteria Scientifically Developed

How have these new patterns been developed? They are based upon scientific studies and research, more than 2500 such studies having been used as a basis. They have had the benefit of critical judgment on the part of several hundred educators. They have been extensively and intensively tested in a group of 200 carefully selected secondary schools of many types and varieties in all parts of the country. The extensive data accumulated have been submitted to extensive scientific analysis and have been interpreted with discrimination and judgment.

What are the characteristics of the new methods? The Cooperative Study feels strongly that on the whole the methods which it is ready

High School

CROSBY EELLS

Careful study has shown that the 200 schools selected for experimental purposes are a satisfactory sample of all accredited secondary schools.

to suggest for use are more scientific, more nearly valid, more flexible and more stimulating to improvement than those that have been in use in the past.

The Evaluative Criteria, as the new measuring instruments are called, consist of more than 1000 checklist items which characterize or should characterize a good secondary school and of some 500 evaluations based upon these checklists.

They are grouped in nine main sections: curriculum, pupil activities, library, guidance, instruction, outcomes of the educational program, staff, plant and administration. The checklist items are to be checked and the evaluations to be made (on a five-point rating scale) by the administration and staff of the school itself. They are to be approved or modified by an independent committee of visiting educators who are expected to spend a minimum of two or three days studying each school.

These 500 evaluations have been arranged in one hundred groups, a school's standing on each of these groups being shown on a graphic device called an educational thermometer.

From this thermometer scale device for summarizing data and reporting on the standing of a particular school, a school can read its own educational temperature and can tell at a glance where it stands in comparison not only with the 200 schools studied but also with other schools of its own region, size, type or accreditation status.

Schools Should Be Tailor-Made

Fundamental to the entire method of evaluation is the recognition that the same type of clothes will not fit equally well all schools. The educational tailors of the Cooperative Study early in their plans adopted the principle of individual tailor-made suits, each fitted to the individuality of the school under consideration. They definitely and deliberately abandoned the principle of standardization. All men are not expected to fit one standard size and style of suit. Suits are tailored to fit different kinds of men. Why should not equal or greater individuality in schools be frankly recognized?

Stated in educational language, the committee in charge of the Cooperative Study adopted the following principle as fundamental to all evaluations to be made in the nine areas mentioned above:

"A school can be studied satisfactorily and judged fairly only in terms of its own philosophy of education, its individually expressed purposes and objectives, the nature of the pupils with whom it has to deal, the needs of the community which it serves and the nature of the American democracy of which it is a part."

In order to obtain an adequate statement of a school's philosophy and objectives, of the nature of its pupils and of the needs of the community which it serves, special forms have been worked out to obtain extensive data that will give pertinent information in these areas. The schools are expected to assemble and interpret this information in these fields prior to making any evaluations based upon it.

An entire year of study was spent in trying out the tentative and experimental forms of the Evaluation Criteria in a group of 200 secondary schools selected from the 6000 accredited schools in the country. The method of selection assured a proportionate number of schools in each state and each regional association. It also provided for schools of different sizes, enrollments, types of

Pupil opinion on guidance, curriculum, extracurricular activities and other aspects of school life is a part of the evaluations made. Photograph from report of Superintendent of Schools, New York City.

control and other features. Superior, average, and inferior schools were included.

These 200 schools were studied and measured not only by means of the evaluative criteria already described but also by the judgments of the visiting committees; by the results of an extensive series of standardized tests (psychologic, achievement and attitude); by an analysis of the success of graduates and former pupils, whether they later went on to college or whether they went immediately into life activities; by the judgments of parents on several significant factors, and by pupil opinion on guidance, curriculum, pupil activities and other aspects of school life.

Another entire year was spent in summarizing and analyzing the extensive data thus collected. One important result was the arrangement of the 200 schools in order of merit from the best to the poorest on a composite of all the different measures used. The best 50 and the poorest 50 schools were then used as criterion groups with which to determine the validity of each of the educational thermometers tentatively constructed.

Some educational thermometers proved to have no discriminative value in distinguishing inferior schools from superior schools, and they and the corresponding methods of the evaluative criteria accordingly were rejected; others had moderate discriminative power and were retained, while a small group of educational thermometers proved to have high discriminative power and were given preferred positions.

Eventually three separate scales were evolved to meet varying needs and requirements in different types of schools: an Alpha scale of 100 thermometers, recommended for use if a comprehensive and fully stimulating measure of all significant aspects of a school is desired; a Beta scale of the best 50 thermometers chosen from the Alpha scale, suitable for use when a general evaluation of a school of sufficiently high validity to merit considerable confidence for general purposes as well as some confidence in the validity of each of the component fields is desired, and a Gamma scale of only 25 of the most discriminating thermometers, useful when it is necessary to make a general evaluation of a school as a whole with a minimum amount of time and effort. The Gamma scale is not sufficiently extensive to give satisfactorily complete measures of each of the nine fields separately.

The Cooperative Study of Secondary School Standards now has available three related publications that are essential if a school wishes to be evaluated by the methods it recommends: (1) Evaluative Criteria (1938 edition), containing all of the checklist items and evaluations in the fields mentioned above, together with blanks for making these evaluations and computing resultant school scores; (2) Educational Temperatures (1938 edition), a series of 168 "educational thermometers" for summarizing a school's evaluations and presenting them in graphic form on the Alpha, Beta or Gamma scale (supplemented by 25 "experimental" thermometers) and for making comparisons with the regional, size, type and accreditation norms mentioned above, and (3) How to Evaluate a Secondary School (1938 edition), a working manual of 150 pages, which gives specific instructions and helpful suggestions for the actual use of the other two publications in any secondary school.*

Careful analysis has shown that the 200 schools selected for experimental purposes are a satisfactory sample of all accredited secondary schools. These differ among themselves, however, in many significant respects. In particular, it is highly interesting and educationally significant to compare the best 50 schools with the poorest 50 schools of this group in some of the important areas studied. Such comparisons will be made in most of these fields—curriculum, guidance, library, and so on—in subsequent articles this year.

*A sample set of these three publications can be obtained from the Cooperative Study of Secondary School Standards, 744 Jackson Place, Washington, D. C., for $2.

City Government and Schools

NELSON B. HENRY

THE literature of school administration includes many references to existing relations between the school system and the civil government in American cities. These relationships vary widely among the cities of 50,000 or more population in the United States.

In some instances the school system is administered as a department of the municipal government, while in others the school district is a separate governmental unit legally independent of municipal authority. Between these extremes, a variety of types of school organization may be observed, some providing for a considerable degree of coordination of school and municipal enterprise, others establishing relatively few points of contact between these two governmental agencies.

Demand for Independence

Educational publications that deal with the problems arising from school and municipal relationships commonly emphasize the potential hazards to school administration of any intimate authoritative connection between school and local political government. Examples are cited of machine control of school elections where school board members are elected on partisan tickets, political interference with the management of the schools where board members are appointed by municipal authorities, and serious curtailment of school appropriations where school budgets are subject to municipal review. The argument is that the nature and purposes of public education are such that the school system should be free from official entanglements with local political authority.

In the interests of security and progress for education in American cities, the demand is made for separate boards of control for the schools, separate financial resources and responsibility, and independent administrative procedures designed to facilitate the operation of the school system as an isolated, noncompetitive governmental enterprise.

A conspicuous example of such pleading is the following declaration presented in a recent publication of the Educational Policies Commission:

"As a unique form of public service, having obligations different from and transcending other services, education must insist upon measures of law designed to assure it that form of autonomy in which it can best discharge its particular functions."[1]

The argument for independent control of city school systems is further advanced by reference to the generally accepted concept that education is a function of the state government. The implication is that municipal governments may not or should not exercise control over a state function. It is true, of course, that education is a state function, but the expression has significance only in pointing out the fact that the federal constitution did not reserve the control of education as one of the functions of the federal government. There is no implication that the state government may not delegate such part of its responsibility as seems desirable to officers of municipal government in cities of the state.

The courts have reviewed this issue in a number of important cases. In some of these cases the ruling has been that the municipal authorities in question have no jurisdiction in school affairs; in other cases, the local school system has been declared a department of the city government. That is, the state legislature may entrust the control of a local school system either to an independent board of education or to a board which is made subordinate to municipal authority; or it may eliminate this board entirely.

The demand for complete separation of school and municipal functions fails to take account of several important aspects of community life and governmental organization in American cities. In the first place, education is but one among a number of essential public services that the citizens of urban communities require and demand of government. Moreover, it is a form of public service that cannot be satisfactorily maintained without the supplementary and supporting services of other branches of local government. The interdependence of school and municipal functions in urban communities is so obvious and so fundamental to the effectiveness of both that complete separation of these two governmental agencies could hardly be desired from any point of view.

Even if it could be demonstrated that the position of the school system is substantially improved by absolute independence of municipal authority, it may yet be important from a community standpoint to consider the effect of such independence in school administration upon other public services which local government must provide for the same population groups.

What Happens in 191 Cities

In a recent report[2] of existing procedures in cities of this country it is shown that local school authorities are dependent upon other public officials in the city, township and county governments for a great number of administrative and fiscal services. In the vast majority of communities the assessment list of the city or county is the basis of local tax levies for school purposes, and the levying and collecting of school taxes are commonly made the responsibility of the officers of local civil government, even in communities in which a separate tax rate for school purposes is authorized.

According to the 1930 census, there are 191 cities of 50,000 or more popu-

[1] The Unique Function of Education in American Democracy, p. 119. Washington: National Education Association and the Department of Superintendence, 1937.

[2] Henry, Nelson B., and Kerwin, Jerome G., Schools and City Government. Chicago: The University of Chicago Press, 1938.

lation. Local municipal officers serve as custodians of school funds in nearly half of these cities and provide auditing service for the schools in one-fourth of them. City officials, or specially designated commissions, are responsible for the review and approval of the budget of the local school system in one-third of the cities of this population group. Municipal legal departments provide legal counsel for the school corporation in 40 per cent of these cities.

Less frequently, but in a considerable number of communities, school authorities have the benefit of the services of civil service commissions in matters pertaining to the selection, classification or tenure of certain classes of employes. There are a few examples reported of cooperative purchasing on behalf of school and municipal departments, and in 36 of the 191 cities specified all or part of the school employes are included in the municipal pension system.

In 76 of these cities, bond issues for school plant purposes involve the authorization or approval of municipal officers. In about thirty cities, municipal authorities exercise some control over the selection of school sites; in 51 cities the title to school property is vested in the city rather than in the school corporation. Municipal officers in 20 cities are responsible for plans and specifications for school buildings and in 30 cities such officers supervise the construction of school buildings. School plant maintenance and even the supervision of janitor service are sometimes entrusted to a city department.

Justified by Experience

These examples of services performed by local governmental units for the benefit of city school systems represent the provisions of the statutes under which these school systems are operated in the cities they serve. The list here presented, although not exhaustive, is sufficient both in number and in variety of instances to indicate that official contact of municipal and school authority does not in itself debauch the school system. The fact that such contacts are so frequently prescribed by law suggests that they are justified by experience and are generally acceptable to the communities.

In the pursuit of the study previously mentioned, school and municipal officers and other interested citizens in 33 cities were interviewed regarding the effects of existing connections between school and municipal government. The school systems in these cities include examples of the most closely coordinated and the most widely separated forms of school and municipal organization, as well as examples of intermediate degrees of coordination. As was to be expected, the conditions described by officials and lay groups in the cities visited indicate that the schools are subject to more or less interference at the hands of political authorities in some communities and are entirely free from such interference in others.

The significant fact is that both favorable and unfavorable school situations are found among the cities where there is relatively little official connection between the school and the municipal governments, while the same observation is made of the group in which the school and civil governments are more closely coordinated. This comment may fairly be made with respect to both political interference in the administration of the schools and financial support for the school system. The results of this inquiry suggest that the problems of political interference and financial support are not permanently solved by the establishment of any particular form of organization of the school systems of urban communities.

It should also be noted that city school systems perform some services that are closely related to certain functions of the municipal government in the cities with which they are identified. In the course of this inquiry many instances were observed of effective cooperation on the part of school and municipal authorities in these areas. For example, the city health department is concerned with conditions that tend to spread contagion, such as the assembling of large groups of children in school buildings. School authorities, likewise, are responsible for the protection of school children against the hazards of epidemics, as well as for their instruction in health information and habits.

In some of the cities visited, the municipal department of health assumes a large measure of responsibility for both preventive measures and health instruction on behalf of the pupils in the schools. In others, the chief responsibility for health work in the schools is left to the school organization, the city authorities providing guidance or assistance as required. Similarly, examples are observed of effective cooperation between school and municipal authorities in the development of community recreation programs. The testimony of public officials and informed citizens in such places does not indicate that the school program is suffering as a result of the cooperative procedures of school and municipal authorities.

Equally significant are the numerous examples of cooperation between school and municipal authorities in relation to the promotion of safety, the protection of property, the prevention of juvenile delinquency and various other welfare and cultural interests of the community.

Closer Relationship Foreseen

The many points of contact between the schools and the departments of government in American cities signify a general recognition of the common interests and purposes of these two units of government. It is difficult to find support for the contention that city school systems cannot safely be operated in conjunction and in harmony with the other departments of local government, since there are readily observable many fine examples of splendid public service now being maintained under such cooperative arrangements. Some of these procedures are prescribed by law; many others have been developed voluntarily by officers of the schools and the municipality in the interest of improved community service. Examples of favorable results from such cooperation are so commonly noted as to warrant the conclusion that they are justified by experience.

It is not too much to expect that further experience with such cooperative undertakings may demonstrate the advantage of even more general coordination of school and municipal functions.

Teaching the Cooperative Way

FLORENCE D. CLEARY, THELMA HURD

and GEORGE L. MILLER

Three teachers on the staff of the Hutchins Intermediate School, Detroit, describe their experiences in planning and carrying out an integrated study program that makes use of situations in everyday life

A YEAR ago we three teachers, representing the English, social studies and library departments of the Hutchins Intermediate School, Detroit, discussed a program for a seventh grade class. We believed that technics involving integration of instruction could be used advantageously with junior high school pupils. The courses of study in English and social studies failed to provide integrated experiences for the group. The social studies curriculum offered American history; the English course included a unit on Robin Hood and the parts of speech, while the library provided for both departments by suggesting supplementary reading.

We realized that the school should furnish a core of rich life experiences and provide activities that would integrate subject matter and eliminate distinctions between conventional school subjects. It is our belief that the American scene offers a rich field of activities providing the children with experiences that produce conditions of real life. Our challenge was how to adapt the material to the needs of the child so that he could develop by actual practice, social adjustment and cooperation qualities that make for democratic living.

We decided to experiment and to combine our efforts in developing an environment so that this class might experience and analyze some problems of American life. Our plans received the support of the administration. The immediate objectives were: (1) to make it possible for children to read widely for enjoyment and for factual information; (2) to provide for real projects and real purposing; (3) to teach pupils to work together in a class or group; (4) to provide for individual differences; (5) to develop technics for thinking, and (6) to seek self-expression in composition, art and poetry.

Photograph From Springfield Public Schools, Springfield, Mo.

Classes were grouped according to reading interests and each group was prepared to write and illustrate booklets describing its own experiences.

The class chosen for the experiment was entering an intermediate school for the first time. The children were from Jewish and American homes, average in intelligence and intensely enthusiastic. The competitive spirit in these children was keen, yet they recognized strong leadership and were willing to work diligently when the goals were definite. They provided excellent material for a cooperative undertaking.

Our classroom procedures were carefully planned. Pupils were assigned to library reading from both English and social studies classes for a period of two weeks. They had access to a number of suggestive lists. Biography and poetry were included as well as stories of American history. Fiction having a background of American tradition was emphasized. Pupils were free to choose books from the lists or to read others which they discovered while browsing about the library.

We asked each pupil to fill out a card for every book that he read. The card included the author's name, title, publisher, date of publication and a short annotation. Class librarians were chosen to check and file the cards. The children were proud of their file and enjoyed helping one another with the annotations. Their comments were written to encourage other seventh grade pupils

to read the books they had found enjoyable. Here are typical annotations:

"'Shasta of the Wolves' is a story of an Indian baby who is lost. A mother wolf finds him and raises him. Shasta has many adventures, so be sure to read this book."

"'The True Story of George Washington' is a story of Washington from his boyhood in Virginia to the time he became president of the United States of America. It tells very unusual tales of Washington's life."

Field Trips Add Interest

During the third week, class discussions began in English and social studies. The same informal conversation about the books was used. Every opportunity was given the pupils to acquire and discuss information of essential events and trends in American history. First-hand information on early American culture was gained through field trips. At Greenfield Village, the American village reconstructed by Henry Ford to preserve an authentic picture of early American life and culture, they saw many of the inventions and traditions that provided the background of early American life. Frequent trips were made to the children's museum, which is administered by the board of education to supply all kinds of visual and aural material for use in the schools in Detroit.

During the seventh week the cooperative group method was discussed with the class. Recognizing the increased need for cooperative thinking, we felt that the children should have an opportunity to learn the technics for obtaining cooperation and to have actual practice in their application. The class then organized into groups according to reading interests. Those who were interested in the frontier chose to work together and those who read of explorers decided to combine their ideas. When they had finished, there were nine groups in the class. All the groups planned to write and illustrate booklets containing stories, articles, original poems and essays based on their experiences.

During this planning period the boys and girls had an opportunity to learn about cooperation. It is difficult for a 12 year old child to follow a leader, to see another person's point of view and to act for the good of the group. Many conflicts arose but through cooperative effort on our part and that of the children we were able to help them think together and adjust their differences. The class used the library conference rooms and the classrooms for group meetings. During this period, we carefully advised but never took charge.

After the books were planned, individual members of each group began to work on their own contributions to the group reports. Pupils went to the library for reference work. The writing was done in both classes and checked by all of us. This was the period for the pupils to express themselves and they were free to do so by writing, drawing or any other medium which they chose as long as it summarized what they had learned and experienced as members of a group.

We suggested that each book contain a title page, a preface or introduction, a table of contents, dedication, chapters and a bibliography. This facilitated organization of the material and at the same time made the pupils conscious of the proper form for bookmaking. Some of the books were illustrated by photographs taken by the pupils themselves, others by original drawings and sketches. Several groups made murals depicting scenes from American life and customs. The results were displayed in the library so that boys and girls who were interested in American life could enjoy them.

Reports Are Summarized

The last six weeks were spent in oral presentation of the material each group had assimilated. The groups borrowed ideas from radio programs, held debates, had jury panel discussions and gave oral reports. This period gave an opportunity for summarizing, for forming conclusions and for general and self-appraisal. It was possible for the children to discuss problems in the light of what they had learned.

A survey of the outcome is difficult for us who have worked closely in this situation. As teachers we learned to solve problems through cooperative understanding and adjustment to one another's ideas. We were anxious to make this a truly integrated project, not an enriched curriculum for one subject. The literature of America was not neglected while the history was overemphasized. Voluntary reading was stressed and we watched to see that time was provided for the pupils to read books of their own interests. If the pupils were expected to work together and adjust differences, then surely, as teachers, we should be able to do so. The experiment offered opportunity for growth in cooperative thinking and planning for all of us.

Book List Is Compiled

The outcomes for the children were many. Certainly perfection was not attained but much constructive work was accomplished. As a result of their reading, the class compiled a list of 150 books and annotated them. This list was printed in the print shop for other seventh grade pupils to use.

Reading was thus encouraged; English was taught as a tool subject; technical English became functional; the class learned bookmaking, and the pupils learned the fundamentals of accurate reference reading and recording. An outcome that must not be overlooked is that boys and girls gained a background of factual information on American life.

The results of this study convinced us that the children experienced a worth while environment where directed growth took place. Now we are trying the same method with three other classes and a homeroom. Three student teachers from Wayne University, Detroit, are working with us and we feel that the experiences they have in cooperative thinking and action will help them to grow in their power to understand people and to solve difficult problems in their teaching.

The children have grown in their power to interpret the physical world and the society in which they live. This makes possible active participation in group life on higher levels by giving opportunities for the practice of habits and attitudes necessary for wholesome group life.

Teachers' Unions and the Law

M. M. CHAMBERS

THE American Federation of Teachers, an autonomous constituent of the American Federation of Labor, was organized in 1916. Approximately 500 local units have been chartered in various cities, some of the largest ones being in New York, Cleveland, Atlanta, Ga., and Chicago. By 1936 the aggregate of individual members was 30,000 and has been substantially increased since that year.

The purposes of the organization have been stated as follows: "To establish teaching on a sound basis of adequate compensation and security of tenure in order that only the ablest and most self-respecting may be the teachers of our children; to organize the teachers in such strength that they will determine the standards of their calling and raise those standards to a high level of excellence; to protect the freedom of teachers by group solidarity and intelligent militancy, and to work together with other social agencies to build a saner economic world in which social justice will prevail."

After analyzing decisions handed down in three cases, Mr. Chambers concludes that the time may come when membership in teachers' unions will no longer be legal grounds for discharging or failing to reappoint our teachers

Propriety Is Questioned

Sharp differences of opinion have arisen at various times among teachers, administrators, board members and school patrons as to the propriety of teachers' identifying themselves with this so-called "teachers' union." On the one hand, it is argued that the teacher's skirts should be kept clear of current economic controversies and that when teachers join a labor organization they thereby step down from the pedestal of impartiality upon which they should maintain a judicious pose. Also, it is said that the interests of teaching as a profession ought to be kept distinct and apart from those of the manual trades.

On the other hand, it is urged that the teacher should be free to participate in any lawful organization which appeals to his taste and conscience; nay, more, that he has a duty to be active in current movements for the advancement of social justice. In many quarters it is believed that the best hope for social progress in an industrial age lies in the organization of all workers, manual and otherwise, in behalf of a more equitable distribution of the national income.

On occasion a few boards of education have enacted rules declaring the policy of refusing to appoint or reappoint any teacher who will not first sign a statement that he is not a member of a proscribed organization and will not become such during the term of his contract. Three times the validity of such a school board rule has been tested in the higher courts but the issue probably is not finally settled. In all three cases the rule was upheld but the reasoning of the respective judges exhibits a significant trend which may point to a different conclusion when next the issue is adjudicated.

The earliest judicial precedent is an Ohio case of 1915 which did not involve the American Federation of Teachers, but a grade teachers' club in Cleveland which fell under the displeasure of the school authorities. The decision of the court, affirming the refusal of an injunction to restrain the enforcement of the school board rule, rested flatly upon the proposition, now modified in several states by tenure laws, that the appointment or reappointment of anyone as a teacher is wholly at the discretion of the board and that the courts must not intervene. Breach of contract, be it noted, is not involved in this litigation.

Said the court: "The statutes will be searched in vain to find any provision to the effect that the superintendent and the board may make selections and appointments only when they are able to give reasons therefor that are satisfactory to the courts. . . . It being true that neither the superintendent nor the board is required by law to state the reasons to anyone for the selections made, can the court enumerate certain reasons as insufficient and then command the superintendent and the board of education not to omit to appoint for those stated reasons and then punish them for contempt if they do so? . . . This doctrine extended to its logical result necessarily takes from the public officer much of the authority given him by law to make the selections in question, and to that extent, and without the slightest warrant of law, passes this power over to the courts. . . ."[1]

Two years later a Chicago case was decided similarly by the supreme court of Illinois. In fact, the majority of the court went even further in asserting the unlimited power of the school board in such matters.

"The board has the absolute right to decline to employ or to reemploy any applicant for any reason whatever or for no reason at all. . . . It is no infringement upon the constitutional rights of anyone for the board of education to decline to employ him as a teacher in the schools, and it is immaterial whether the reason for the refusal to employ him is because the applicant is married or unmarried, is of fair complexion or dark, is or is not a member of a

[1]Frederick *v.* Owens, 35 Ohio Circuit Court 538 (1915).

trades union, or whether no reason is given for such refusal. The board is not bound to give any reason for its action."[2]

But here two of the judges, though concurring in the result, wrote into the record a significant qualification: "This power does not, however, include the power to adopt any kind of an arbitrary rule for the employment of teachers it chooses; for a rule can easily be imagined the adoption of which would be unreasonable, contrary to public policy, and on the face of it not calculated to promote the best interests and welfare of the schools. . . . A rule that would clearly have no relation to the good of the schools, discriminating against the employment of certain classes of persons as a purely arbitrary exercise of the board's discretion, would not be, in our judgment, a valid exercise of the board's power."

These two judges concurred in the decision of their colleagues only because the proscribed organization had been alleged to be inimical to the discipline of the schools, and on this point they accepted the judgment of the board of education.

The next case arose in Seattle and reached the supreme court of the state of Washington in 1930. The board of education enacted a resolution not to appoint or reappoint any person as a teacher while a member of the American Federation of Teachers, and to require every prospective appointee to sign a declaration to the effect that he was not a member of the federation and would not become a member during the term of his contract. Refusing an injunction against the enforcement of the resolution, the majority of the court relied upon the theory of freedom of contract and declined to intervene.[3]

Judge Beals entered a vigorous dissent from the majority opinion. Said he: "There is a great difference between the exercise of that judgment and discretion which the board must exercise in individually contracting with teachers and the laying down in advance of a definite rule whereby certain persons are excluded from such employment for reasons having nothing to do with their moral or physical characteristics, their educational qualifications or their general ability as teachers.

"It must certainly be admitted that a board of school directors could not resolve that it would employ as a teacher no one who was more than 6 feet or under 5 feet 4 inches in height, or who possessed or failed to possess some other physical characteristic wholly irrelevant to the teaching ability of its possessor. The action of the board in insisting upon the maintenance of any such whimsical standard would certainly be restrained by the courts.

"It seems to me clear that . . . it must at least be held that that portion of the resolution here complained of, by which the teacher signing the same agrees not to join the federation during the term of the contract, is ultra vires (beyond the power of the board). . . . The principle underlying the question is, it seems to me, of very great importance. I am of the opinion that in adopting the resolution . . . the board of education exceeded its lawful authority and, whatever may be said as to its power to carry into actual practice the principle laid down in the resolution here complained of, the board's action as taken should be restrained by the courts."

Judge Beals' position is essentially the same as that of the two specially concurring judges in the Illinois case. Together they point toward a correct distinction between the scope of a board's authority in making appointments and its rule-making power.

Rapid extension of tenure legislation among the states places a growing number of teachers in a status where their annual reappointment is not wholly at the whim of the board but is mandatory by statute unless good reason is shown. No case has yet reached the higher courts in which a board of education has refused to reappoint a tenure teacher because of membership in a teachers' union. Insubordination is generally listed as good cause but the proof would necessitate a fresh test of the validity of a rule forbidding membership in teachers' unions.

The tenure statutes so change the situation that none of the three decisions just discussed would be exactly in point as a precedent. The rule would have to stand or fall on its reasonableness, without the aid of the theory that the board may lawfully act arbitrarily in individual cases of the appointment of teachers. Hence, minority opinion in the Chicago and Seattle cases may prevail.

[2]Fursman *v.* City of Chicago, 278 Ill. 318, 116 N. E. 158, L. R. A. 1917 E, 1069 (1917).
[3]Seattle High School Chapter No. 200 of the American Federation of Teachers et al *v.* Sharples et al., (Wash.), 293 Pac. 994 (1930).

Teaching Practical Politics

SOPHIE POLLACK

WHILE high school pupils are gaining experience in school elections, there is still a great gulf between the idea of government usually taught and government as practiced. We recently asked several hundred schools whether they were acquainting their pupils with the workings of their own local government.

These schools are teaching practical politics:

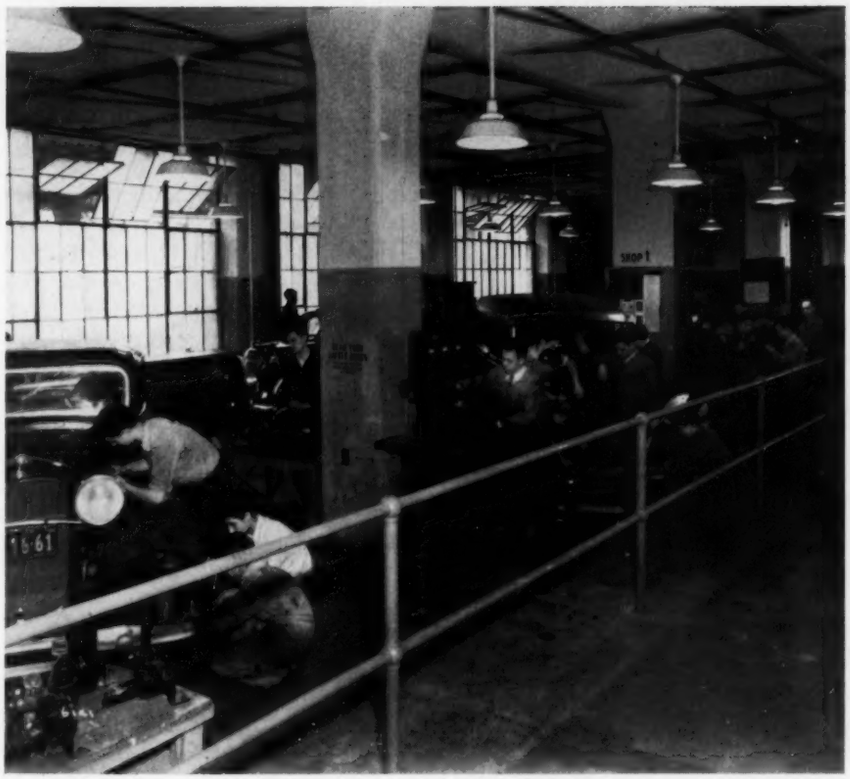
In Weld, Maine, the high school pupils discuss the warrant of the annual town meeting and vote on it. Later they attend the town meeting itself and compare their ideas with their parents' action.

In New York City a civics class of the Julia Richman High School did propaganda for the new city charter later adopted.

The campaign for a city manager in Des Moines, Iowa, was started by two or three seniors in Theodore Roosevelt High School.

The enthusiastic work of a group of Tulsa University students defeated the political machine when they elected their professor, Col. Oscar W. Hoop, police commissioner of Tulsa.

Leadership involves the responsibility for arousing zeal for democracy and guarding the four essentials; free speech, free press, free assembly, secret ballot.



Once 90 per cent of the teaching in industrial arts consisted of demonstrating and perfecting manual skills. This is no longer true. Photograph from "All the Children," the pictorial annual report of the superintendent of schools of the City of New York.

The New Teacher of Industrial Arts

J. ERLE GRINNELL

AMONG the many changes wrought in education during the last score of years none is to be more commended than the change in the industrial arts teacher. A generation ago he was an ill-nourished and skeptically regarded limb on the faculty tree. His education was scant, rarely more than two years beyond high school and often not that much. He was considered to have no interest beyond his shop and, perhaps in retaliation, perhaps in defense, he took little interest in the other educational activities of the school.

Like most of the pupils who were sent to him, the shop teacher was inclined to look askance at the intricacies of English and the abstractions of social science. He was intensely practical and concrete and he believed that his department needed nothing under the sun but good equipment, good hands and the ability to read instructions and follow them carefully.

Today he plays a much more vital part in the whole program of the public school. He is more likely than not to be a college graduate; his interests in the main are the interests of the whole body of teachers; he is active on faculty committees; he directs clubs other than those in his particular field; his opinions of educational matters are respected, and he sees his work as part of a larger education.

His language in the shop is not the language of the street and the sweat shop; he takes a measure of pride in his ability to give his directions in clear, forceful and direct English. His pupils recognize that he is educated much as their other teachers are educated and he draws well-balanced pupils into his courses. They recognize in him a specialist who is also a man of parts, who can discuss ably with them some of their ambitions and stimulate them to higher general scholarship.

A few years ago high school principals and counselors had the notion that boys who were misfits in high school, who could not or would not wrestle with science and language and social studies, should be directed into colleges for the training of industrial arts teachers. Even without such particular guidance, boys flocked to such colleges carrying with them the conviction that the way to teaching industrial arts was along a smooth and well-marked route of uninterrupted shop courses.

For a few years they were not greatly disillusioned. Now they know, and most informed principals and counselors know, that teachers of industrial arts are confronted by as difficult a college course as other teachers with whom they will be associated in their teaching careers.

It is in that complication and broadening of the teacher training course that the key to the change lies. Students who enter first rank institutions for the training of industrial arts teachers learn before they have the dust of travel off their feet that they face four years of seasoned education. They learn from faculty members and upper classmen that they must acquit themselves well in English, science, history and mathematics.

They also learn that they must study education, that they must see secondary education as a whole and in its integral parts, that they must master principles of administration

and supervision and measurement. They are told—and not grimly—that they must become broad without for a moment relaxing the intensity with which they master their specialty and its related fields. Indeed, they are not slow to grasp the principle that to be masters of their special field they must get below its immediate and physical aspects.

Forward looking administrators have sensed the growing significance of industrial and vocational education and have pitched the new education of teachers to fit exacting demands. No longer do they encourage the continuance in college of students who are openly hostile to the sort of work they assiduously avoided in high school. The new student must be able to read a book swiftly and intelligently and he must be able to report in clear English what he has seen and done. He is expected to be something of a prophet of the new industrial education. He is taught to experiment, to have scientific attitudes and to report through state and national associations and periodicals what he is doing.

The student is no longer encouraged in the belief that 90 per cent of his teaching will consist of demonstrating and perfecting manual skills. The teacher ideal is kept constantly before him; he must be more than a director of shop activities; he must be a counselor, a colleague of other busy teachers on committees building a better education, a force in the community, an articulate interpreter of his department to his community and a potential supervisor, principal and superintendent.

Alumni Advice

Important among the influences molding undergraduate attitudes toward a broader and more significant education coupled with even more intense technical training is the advice of returning alumni. They tell the prospective teacher of the competition he must meet on high school and vocational school staffs; they tell him of embarrassments that lie in wait for him if he does not learn to spell accurately, to write and speak with some clearness and to recognize the importance of understanding social and educational conditions of the nation.

His own field, they tell him, is constantly becoming more complicated, more insistent on scholarship, more difficult for the shop loafer. They talk of their part in the operation of the high school and they talk as peers of the best educated members on the staff.

The average industrial teacher needs to know more of science and to be a better mathematician than any except the teachers of science and mathematics. He has the advantage over other teachers in that he is making constant use of the facts and principles involved. Many of them have gone beyond the requirements, exacting as they are, and have prepared themselves for any call that might arise.

Alert to Social Changes

Social science has also been a rapidly expanding requirement for the industrial teacher. He no longer turns a broad back on social changes and their effects upon industry. He is trained to be alert to movements before they are actually felt by the populace; indeed, it is the hope of the leading educators in industrial education that the next generation will see industrial teachers pioneering in social change rather than serving as belated recorders and servants of that change. Labor, industry, technologic advance, government, educational philosophy, vocational innovations, all are subjects of careful study in the new education of teachers. The alert student searches history for its implications. He sees in the large the panorama of progress and is fired with understandable enthusiasm for industrial education.

Whereas once he avoided mastering his native language and developed immunity to its rules and principles, now he plunges into it and comes out with enough skill to whip an article into shape, to write a compelling letter of application or to give a good lecture on his subject. He discovers rules of order and cultivates some of the skills of public speaking.

Boys in industrial education courses are giving increased attention to the polite amenities of life. They are learning to dress with distinction, to carry themselves with dignity and propriety at a formal dinner, to dance well, to make acquaintances easily and to maintain their poise in difficult situations. They give leisure time to music and take an active part in musical organizations. What would have evoked a loud guffaw in the industrial student of a generation ago is now regarded as proper and important.

Much remains to be done. Students will wander into the industrial teacher training colleges because a principal believed that they could not succeed at anything else. Here and there a college faculty member continues to deride liberal education as an excrescence and a pointless waste of time; here and there a student is heard insisting that industrial education students must be "rough and tough" and that they have no need for polish.

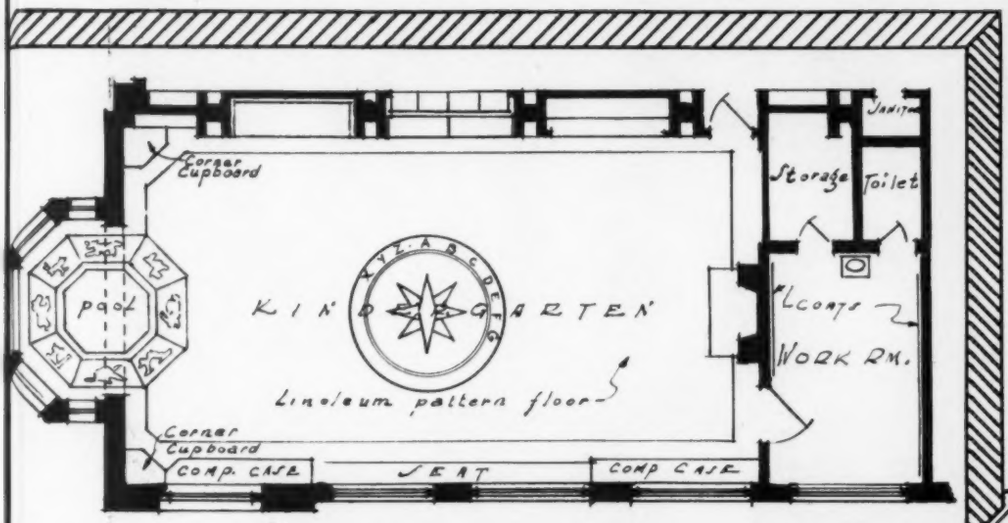
The hill is not scaled, but no longer do college leaders face the discouragement of faintly or openly antagonistic faculties and of students who insist on sliding back nine steps as often as they are pushed forward ten. Education begets education, and progress grows more rapid year by year. It will not be long until industrial education teachers will exercise the unqualified leadership that society already requires of them.

Helpful Science Courses

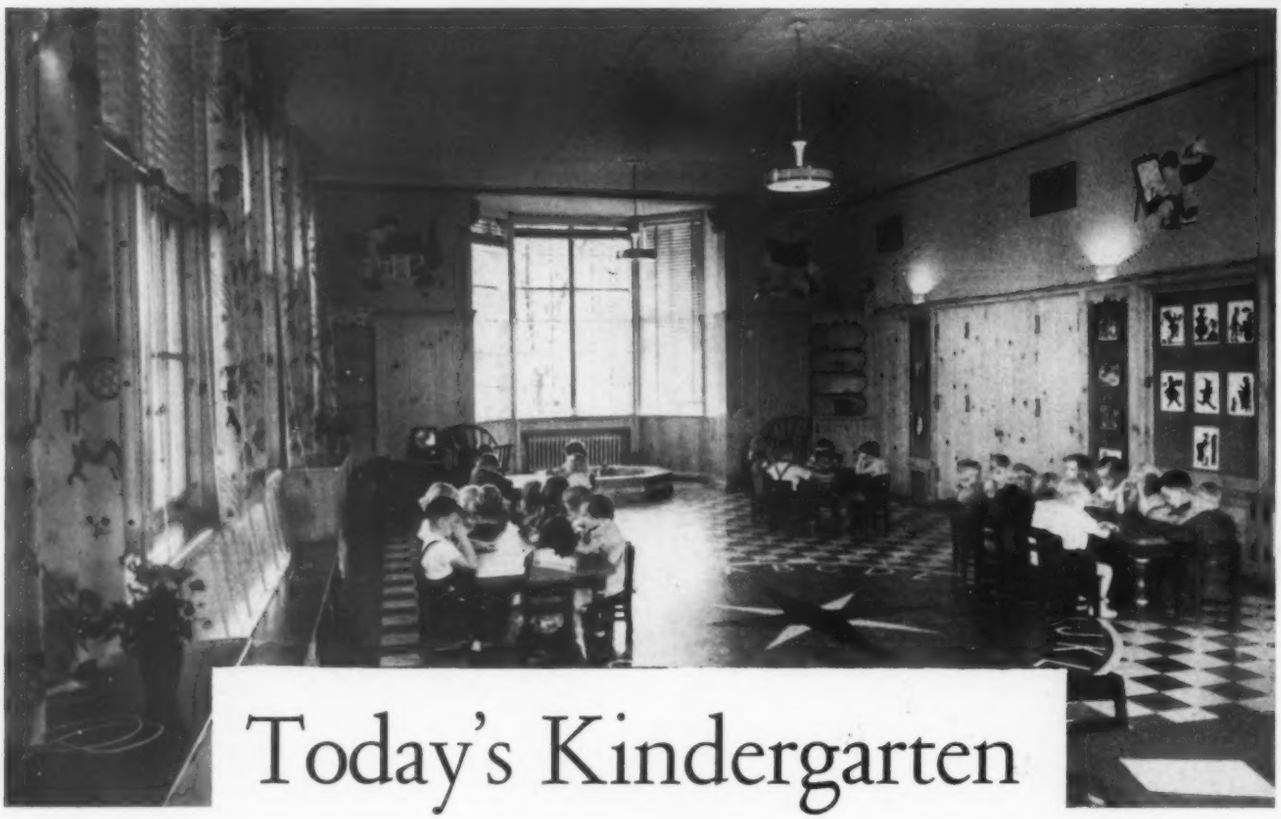
High school pupils want to know about sex, reproduction, love, God; how to get along with the opposite sex; how to keep from having pimples; how to develop a pleasing personality; how to keep physically healthy and mentally fit, and how to attain security in their thinking about a confused world.

Science courses at the South High School, Denver, are meeting these basic needs, according to Norris Bush, instructor. Mr. Bush believes that: (1) science courses should be completely reorganized to fit basic needs, not college entrance requirements; (2) all pupils in high school should study at least two years of science in order to live intelligently in this highly scientific world; (3) science courses should be functional, live and vital to boys and girls, and (4) pupils and parents really like such courses of science instruction.

KINDERGARTENS



Floor plan and two interior views of the colorful kindergarten at Washington School, St. Joseph, Mich. Handmade blue ceramics form the inside walls and floor of the tile pool in the bay window. The furniture is adapted to childish interests: dolls, building blocks, the play store, play apparatus, housekeeping and household mechanics, music, nursery rhymes and stories.



Today's Kindergarten

WARREN S. HOLMES

THE present generation is characterized as the first to give general recognition to the values inherent in child psychology. This is responsible for the revolution taking place in elementary education, and, likewise, gives the cue to modernism in school architecture.

This psychology probably finds its best interpretation in the kindergarten classroom, because the kindergarten is comparatively new and unhampered by traditions that fetter both education and architecture for the grades and high school.

Basic ideas of kindergarten procedure are rapidly becoming pacemakers for all primary education. Children learn from real situations; make play out of work, and, *vice versa,* work at play by dramatizing and developing desirable habits and attitudes. They learn how to be healthy and graceful, how to be honest and congenial with their fellow companions and they become interested and ambitious.

No wonder that kindergarten teachers have to be among the best and, if the kindergarten can get results in all these phases of child training, where is the citizen who will deny children this heritage and who can watch them and doubt the results?

The job of the architect is properly to environ this program. The first requirement is space. The kindergarten and its accessories require at least twice and, in some instances, three times the space usually allotted to the so-called standard classroom.

At this age, the school emphasizes teaching the child cleanliness and neatness in caring for his own belongings. There must be a convenient coat room and a place in which each child can keep his own soap and towel, and near by, the toilet and lavatory. The furniture will consist of tables and chairs and well-designed play materials. These will be supplemented by well-constructed miniature furniture by means of which the child can simulate the commonplace procedures he sees carried out in everyday living.

Since the child is not to be assigned a desk and since the tables are too low to permit the use of drawers, it becomes necessary to provide compartment cases with an easily accessible pigeon hole or section for personal belongings. These are best equipped with rolling doors, so designed that the child will not catch his fingers when operating them. These compartments are storage space for materials that cannot always be attractively arranged. The tops of these cases may be linoleum in marbleized finish, a practical covering.

Housekeeping has no point without eating, and small stomachs are soon emptied when the work is both urgent and arduous. There should be a small kitchenette from which lunch may be served by the children and in which dishes may be thoroughly cleaned and systematically put away. A low sink, an electric plate, some shelves, a cupboard and a hanging strip with hooks form the essentials, all of which are enclosed in a recess behind attractive doors.

Small rugs permit lying down for the rest period. There is an outside door leading to a sandy terrace where children can go for air and still keep

Opposite page: True color harmony prevails in this kindergarten with its yellow walls and acoustically treated ceiling. The knotty pine wainscot and trim finished in natural color and the venetian blinds blend with the basic color and make possible the use of a checkered linoleum floor with an inset alphabet rug. On its border the story telling ring forms.

Above and at left: At intervals on the walls are painted murals depicting child life and interests. Art and design are cleverly combined throughout the room to create an atmosphere that makes the child forget himself and want to participate. The green tile pool below is set into the window recess and balances the fireplace on the opposite side. Its color and interest are enhanced by aquatic designs.

their feet dry. Correct eating and good health habits are desirable accomplishments at this age.

Other phases of kindergarten life are to interest the child, to reconstruct and develop him, and to encourage his participation in group activities that will socialize him and make him capable of accomplishing more in each of the succeeding school years.

This is accomplished in part by appealing to the child's natural interests through dolls, building blocks, the play store, play apparatus, kindergarten music, nursery rhymes and stories. The furniture adapted to these interests in turn gives character to the room.

Culture makes many demands. In addition to housekeepers, there are needed kindergarten mechanics, artists, musicians and some academic proficiency, for one cannot solve many of the problems of this world without at least working knowledge of how to make words and how two and two make four. Tacking space is, therefore, required; also some

chalkboard, an easel or two and wall cases for exhibits.

It is the architect's task to organize all these into an orderly procedure; to furnish suitable storage, and adequate display space; to make provision for the various activities; to create environments that appeal to and develop the esthetic sense; to plan for interesting collections, pictures and projects, and to provide for a changing panorama of work in ways that appreciably change the appearance of the room from time to time to conform to the comfort, tastes and fancies of imaginative children. All of this helps to provide an easy and natural association of the child with that which he is to learn.

Certainly the box classroom (so common in American schools), devoid of design and teacher conveniences, ornamented from fancy, without understanding of pupil psychology and teaching methods, has proved a poor solution for this complex situation. Therefore, it has become usual for architects to defy tradition and to depart so far in the use of color and design for the kindergarten that the result can scarcely be recognized as a classroom. Often every square foot of wall and floor space in the room is enlisted to perform a definite task, useful and esthetic.

In one kindergarten a pleasing tone of bright yellow was selected for the basic color of walls and ceiling. The natural color of the knotty soft pine wainscot and wood trim was retained in a dull finish. The venetian blinds were similar in color tone.

The high reflection values and simplicity of the walls and shades made possible the use of a striking checkered pattern in the linoleum floor with an alphabet rug as the center of interest. Other animal figures were incorporated in the floor around the pool. These designs are useful, too, for they mark the hopscotch court and the story telling ring which was always so difficult to form when Johnnie had no line on which to put his feet.

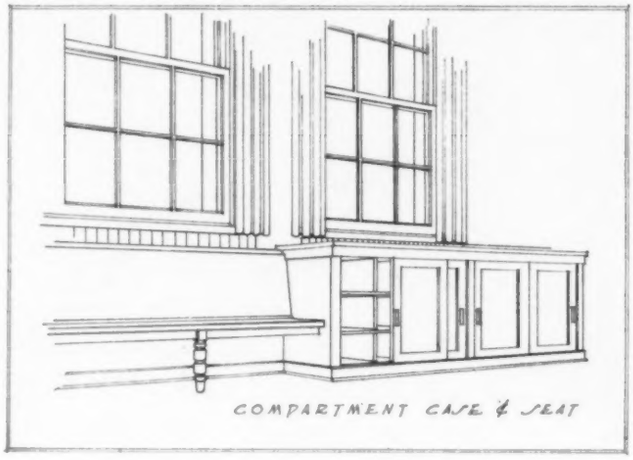
Green was used in the tile pool and furniture and echoed in the potted plants on the brick window sills. In the wall space above the wood wainscot and spotted at pleasing intervals, the art teacher painted murals depicting child life and interests.

Into this simple but impressive background a variety of interesting and colorful detail has been worked. The tile forming the back of the fireplace is graded in tones of red orange and yellow to simulate the glow of flame when lighted. The twelve tiles forming the borders illustrate A. A. Milne's poems, "Cherry Stones," "The Emperor" and "King Hilary."

The tile pool is at the opposite end of the room in the bay window. Its color and interest are enhanced by story telling tile inserts and by aquatic designs; a few iridescent tiles in the blue handmade ceramics form the inside walls and floor of the pool.

There is color in the linoleum tops of the compartment cases and the insides and edges of the corner cupboards are painted bright colors. The colors in the hardware, electric trim and clock have been carefully selected to add to the interest and harmony. There are interesting colored figures in the window curtains that are similar to, but do not repeat, those in the floors and walls.

The color schemes established for these rooms are based on psychologic and light reflection values, rules of harmony and maintenance considerations. Samples of the linoleum flooring, wood wainscoting, tile for the pool, acoustics materials, window hangings, venetian blinds and hardware were assembled on a table in the center of the drafting room and left there for several days. Criticism and suggestions were given freely by the kindergarten teacher, art specialist, interior decorator and even office boys. Many substitutions were tried out and adjustments made where



Compartment cases with sections for personal belongings and places to store work materials help to teach the child neatness. Cases are equipped with rolling doors so designed that the child cannot catch his fingers. Tops of the cases provide additional work spaces. Lunch may be served from the kitchenette with its ample shelves and cupboards.

Small children need lunches between meals and housekeeping becomes more interesting when real food is served.

possibilities for improvements were discovered.

The decorative figures were designed and colored by Marcella Orr Rosa and all color work was installed under her direction. Every figure ties up with something dear to the child's heart. The result is absolute color harmony with a sharpness of color pitch that makes these rooms sparkle with beauty, the type of beauty that grows more interesting by study and association.

"Too fussy," some readers may feel; but not if we are to impart education by environment. Interest in this room is electrified by color to inspire appreciation of the beautiful and to create joy, happiness, ambition and desirable attitudes.

On every hand are things to do and things to do with and places to store these when they are not wanted. Art and design are combined with utility to interest and encourage the child to do for himself. The atmosphere of the room tends to make the child forget himself and want to participate.

Ceilings are acoustically treated to control noise. All work spaces, including the exhibit cases, are made low to fit children of this age. The chalkboards form easels and extra tackboard when required. Each decorative feature has been studied to tie in with kindergarten activities and child interest and is executed in good craftsmanship. Ample opportunity is provided for the exercise of the child's imagination and handwork.

In evaluating the psychologic considerations involved in the design of this interior, the needs for the care of the child's street clothing, lunch and rest requirements and the storage of his work project materials were first provided. His health requirements were met with an abundance of sunlight and artificial ventilation, the open air terrace and convenient toilet accommodations.

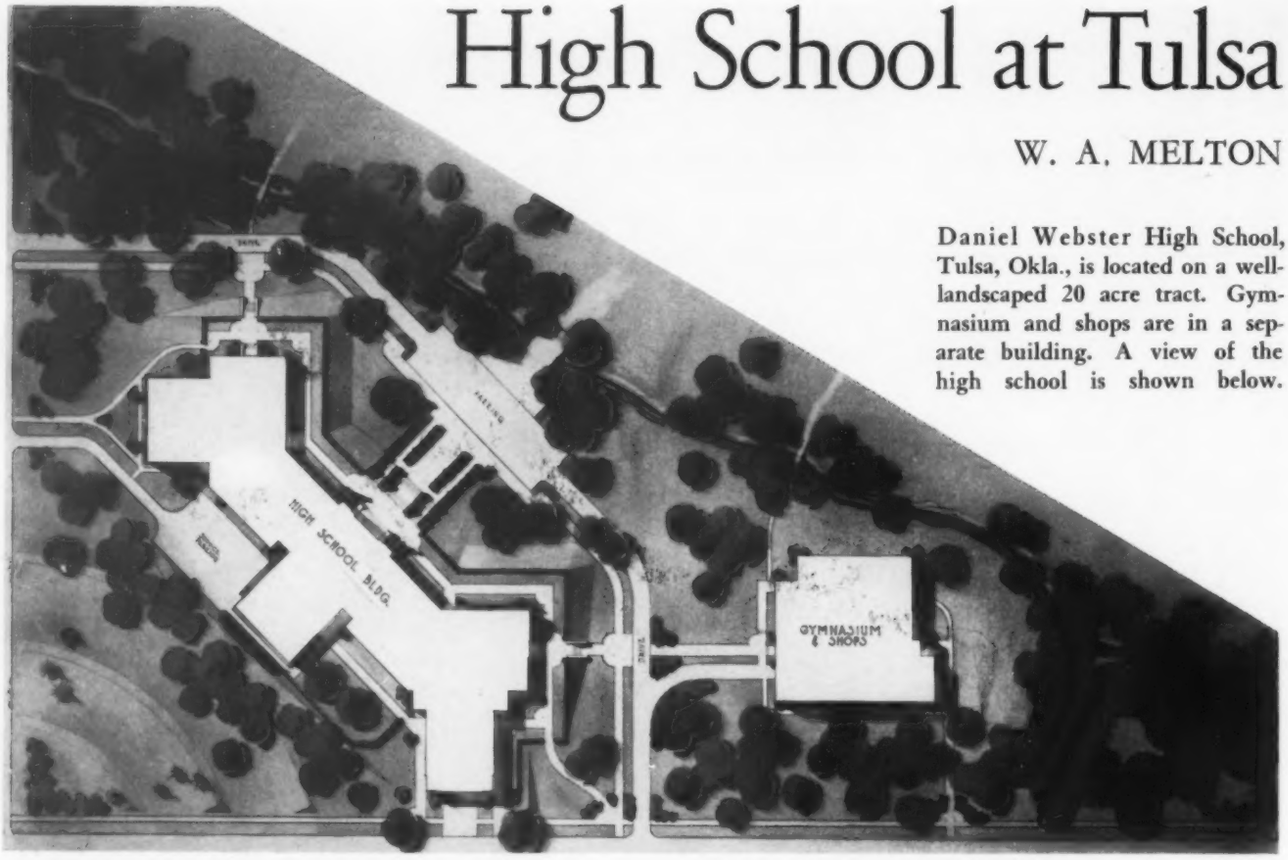
His social needs were next solved by the activities centering around the dolls' furniture, building blocks, sand box and growing bins. These are further provided for by the playstore, play apparatus and story hour, supplemented by the fireplace and story telling ring.

His cultural and esthetic needs were definitely provided for in a carefully selected color scheme accented by figured designs that are executed in simple lines and bright harmonious colors characterizing the stories, songs and folklore that constitute his literary understanding. These are examples of how studied educational environments are coming to characterize the modern school interior for the small child.

All this has been accomplished without forcing in architectural form to create an effect of modernism. When the essential needs were met, there was no room for this. The effect produced, however, is so different from the usual in kindergartens that it cannot be accurately described by any term other than "modern."

High School at Tulsa

W. A. MELTON



Daniel Webster High School, Tulsa, Okla., is located on a well-landscaped 20 acre tract. Gymnasium and shops are in a separate building. A view of the high school is shown below.

THE Daniel Webster High School is part of a $3,000,000 school building program at Tulsa, Okla. The entire program includes additions to eleven elementary school buildings, a senior high school on the east side of the city and the Daniel Webster High School on the west bank of the Arkansas River.

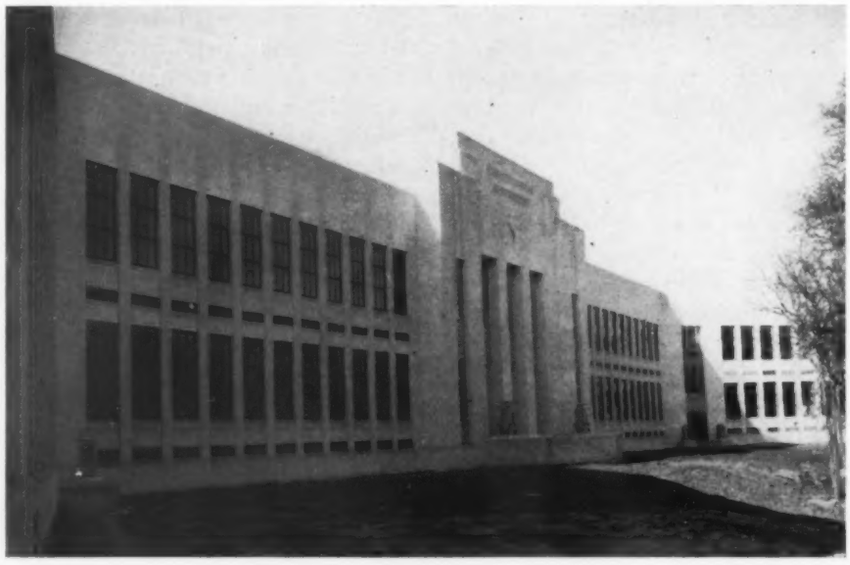
About 15 per cent of the high school population will be served by this building, which will accommodate 750 pupils. It is a two story structure located on a 20 acre tract in a grove of trees. Built of white brick with placid dignity, the building depends on mass and scale for its beauty rather than on ornament.

The general plan was carefully studied so that the various departments could be grouped for the convenience of the teaching staff. Any department developing noise or sound of any description is completely isolated from other parts of the building. The choral room, the auditorium, the swimming pool, the gymnasiums, the kitchens and the shops all are situated so that they cannot interfere with one another or with the academic work. The auditorium can be shut off from the rest of the building for use by the community as an independent unit.

Another correlation between the school and the community is the child development service of the home economics department. A selected number of neighborhood children of preschool age are cared for during the day by the home economics classes. This gives excellent practical training to high school girls and offers a real service to many families in the community.

Each classroom is designed for its special subject. The old idea of repetitive box-like rooms with fixed rows of seats has been abandoned.

The same simplicity of design used on the exterior of the building has been carried out in the interior decorations. Corridors are wainscoted



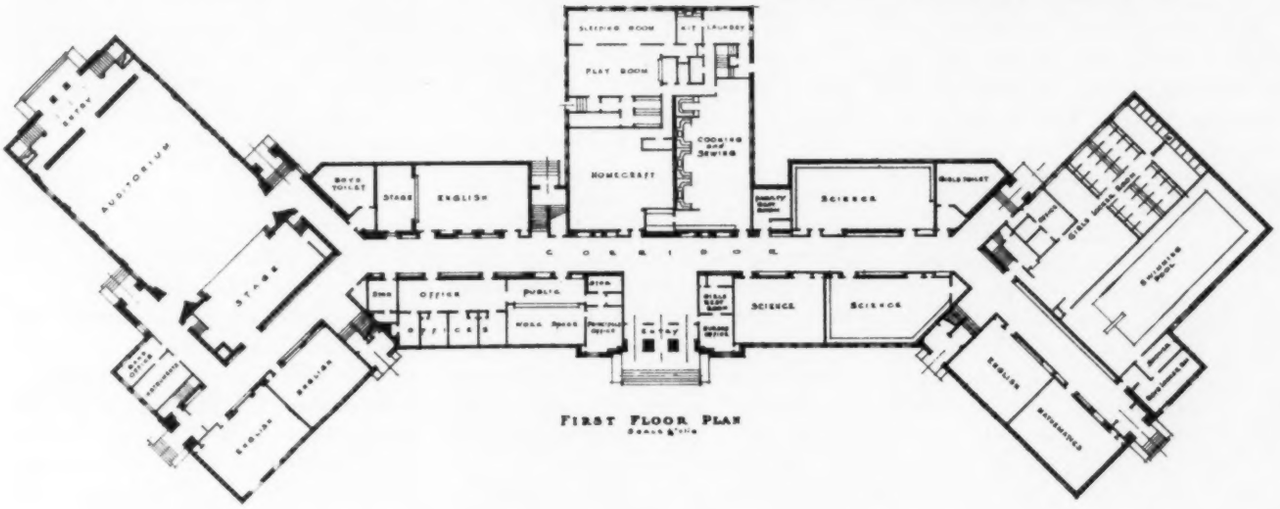
with salt glazed tile and walls are of soft, light-reflecting colors. All ceilings are of sound absorbent materials and windows of the latest type set in steel sash admit ample well-controlled light. All rooms may be darkened for visual education.

The auditorium and the library are done in soft rich colors, which have been carefully worked out, but through all this richness the keynote of simplicity has been maintained. The stage of the auditorium is fully equipped for both stage presentations and sound films.

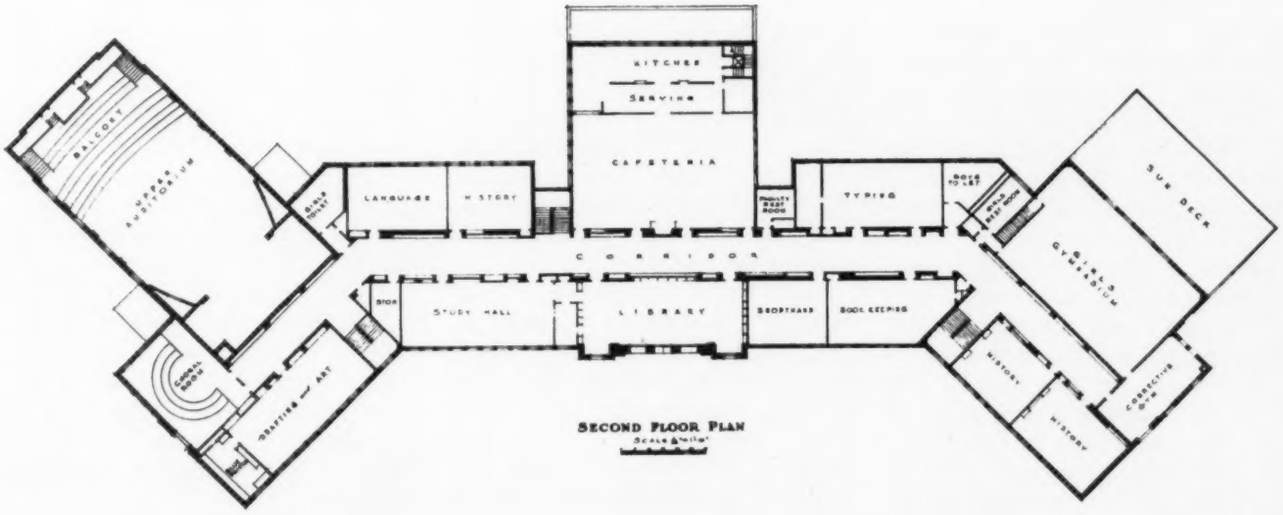
The heating system consists of two automatically fired boilers in a large pleasant basement room which supply steam to unit ventilators in each room with the exception of the auditorium and gymnasiums where preheated air is forced in by circulating fans.

All the unit ventilators are thermostatically controlled and during

Rich soft colors have been carefully combined in the library above. Below: First and second floor plans show how the various departments are grouped for the convenience of the teaching staff. All rooms may be darkened for visual education and each classroom is designed for its special subject. Arthur M. Atkinson was advising architect and associated with him were John D. Forsyth, Raymond Kerr and William H. Wolaver.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

extremely cold weather or in the early morning the automatic dampers will set themselves to recirculate the air in the room. When the temperature of the room has reached the desired point, the controls begin to shut off the steam and at the same time to open the damper and to admit outside air.

If the temperature continues to rise, controls will completely close the steam valve and will adjust the damper so that it will be taking all the air from the outside; in which event, the system becomes a cooling rather than a heating system. The heating plant is zoned so that the auditorium, the gymnasiums and the school proper are on separate branches and can be operated independently.

The lighting system is semi-indirect and develops an intensity at the working level consistent with the work to be done in each room. Glare has been completely eliminated.

The arrangement of the administrative offices has been carefully studied not only to expedite routine work but also to afford opportunities for guidance and for the care of both the physical and mental welfare of the pupils.

A two-way public address system centers in the principal's office. Radio programs, programs originating in the choral room or in the auditorium, phonograph records and announcements may be transmitted to any room or groups of rooms at the control of the operator. It also is possible for any teacher to converse with the principal's office without leaving her desk.

The science department is fully equipped for modern instruction. Fume hoods exhaust offensive gases from the chemical laboratory within a few minutes.

In addition to the child development section of the home economics department, there is a large room containing a number of fully equipped kitchens. Also there is a complete sewing department with fitting rooms and a model laundry containing all modern equipment.

The shops for the manual arts work are located in a separate building. These shops are equipped with diversified wood and metal working machinery of the latest pattern. Internal combustion engines and electric wiring also are stressed. In the same building is the gymnasium for boys. This is the largest gymnasium in the city and is equipped with folding bleachers, a regulation basketball court and two practice courts, wrestling rooms, a corrective room and shower and locker rooms.

The swimming pool and the girls' athletic department are in the main building. The pool is standard, complete with water conditioning. The girls' locker room contains dressing booths, showers and lockers, and is equipped with hair dryers. The walls of the gymnasium are wainscoted in deeply stained wood.

Special stress has been laid on the corrective gymnasiums. These rooms are fitted with the latest types of corrective equipment and with mirrors that enable the pupil to observe his posture. A complete photographic record of each individual is kept.

The art and mechanical drawing rooms have north lighting and more than half of the rooms have two or more walls containing windows. With the exception of a few special rooms in which wood floors are desirable, all floors and corridors are of asphalt tile.

A stadium, football field and running track are contemplated. These will provide outdoor athletic facilities.

Training in the Trades

COMPLETION of the new Timken Vocational High School in the fall of 1939 will give Canton, Ohio, a school representing a cross section of the worth while vocational interests of that Ohio industrial town, according to Jesse H. Mason, superintendent of the Canton public schools.

A well-rounded program of education will be given in traditional academic subjects to accompany each practical course. Adequate facilities for library, laboratory and classroom activities are allotted space in the architect's drawings of the new plant.

All shop and classrooms will be outside rooms providing the maximum amount of daylight illumination. Sections of the building that require less light, such as corridors, auditorium and gymnasium, occupy the center of the building. Light wells located on each side of the auditorium and gymnasium provide direct daylight illumination in the corridors. The auditorium is two stories high and the gymnasium, directly above, extends from the third floor to the roof.

Since Ohio law covering school building construction limits the height of buildings to four stories, a design was worked out for a roof structure that provides space for a music department, cafeteria and kitchen above the fourth floor.

Placed on the first floor will be six shops with a total pupil capacity of 215. On the second floor will be shops and rooms for teaching welding, sheet metal and ventilating, vocational drafting, machine drawing, clothing, home making, office practice, typewriting and art.

The third floor will accommodate 537 pupils in its seven classrooms, two related classrooms, one pattern shop, one electric shop, library study hall and two drawing rooms.

Six classrooms will occupy the fourth floor. In addition, there will be a foundry, a related classroom, a shop devoted to building trades, and facilities for teaching applied chemistry, cosmetology, mechanical testing laboratory, physical science and drawing.

A testing laboratory and a reference library will enable the school to render exceptional community service. A survey is under way to determine the kinds of testing machines most needed and these will be available for teaching and also for the use of industrial firms and business concerns. In the reference library will be collected technical material and books usually found only in the best technical schools and colleges.

Cost of the building and equipment will be borne by the Timken Foundation. Maintenance will be financed by the Canton board of education.

The Case for Oil Burners

WILLIAM E. GILLIS

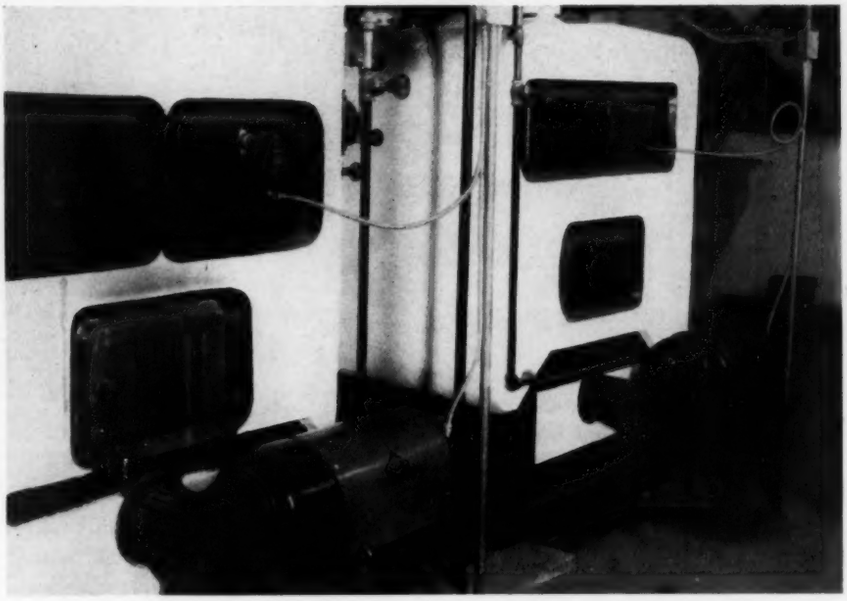
THE question of the type of heating plant to be used in a school should be determined by local conditions. The size of the building, the space available, the number of custodians on the staff and the comparative cost of fuels in the locality, all have some bearing on the decision.

In deciding upon the installation of a heating system, too much stress may be placed upon cost, while other important factors, such as cleanliness, healthfulness and the labor and time saving features, are overlooked. The individual who will readily purchase an automobile in preference to a bicycle even though the cost of the former is greater may at the same time favor retention of hand stoking with a heating plant using coal.

A small building serviced by one janitor will not show a saving in terms of wages through the use of an oil burner. However, the janitor will be relieved of some of the heavy work and will be released to take care of work about the building. Automatic heating will deprive him of one excuse for not attending to his other duties.

In considering a larger building in which two or more custodians are employed, a saving in wages can be effected inasmuch as the modern oil burner requires little attention. Even when the mechanism is not automatic, little time is taken in starting the heat for the day and only occasional visits of inspection during the day are necessary.

When oil burners are used the space devoted to storage of coal may be employed for other purposes. When bids on coal are called some time during the summer the price given holds for a certain length of time; then an increase goes into effect. It is not unusual to see not only the coal bin but also other sections of the school basement filled with coal so as to get the largest quantity at the lowest price. This is economy at the expense of cleanliness and health. Oil storage stands for increased space and less dirt from coal and ashes, plus the elimination of ash removal.



For smaller buildings not having more than 7000 or 8000 feet of radiation, the pressure atomizer type of oil burner (above) has certain advantages. The horizontal rotary type (below) is suited to larger buildings.

Heating problems bother the supervisor at various times during the year. There are those first fall days when one is undecided as to whether fires should be started or not. There are early morning glances at the thermometer and surmises as to whether the sun will come out sufficiently to warm up the building to the required 68° F. There are always teachers who look at the thermometer and send out frantic calls for heat. Then, after a fire is started

Old Lyme High School, Old Lyme, Conn., is heated with the new type of oil burners.

and the building is heated, windows are flung open and poor old Joe Janitor wants to know why he had to build a fire to heat all outdoors.

A similar problem arises in the spring with the tapering off of the cold weather. It is during these spring and fall seasons that the greatest economies are effected by an automatic oil burner.

In the winter there are often heating difficulties at the beginning of the day, especially on Monday morning. The custodian working alone has many extra duties to perform during the winter season and the load is sometimes too much to carry when he must at the same time see that uniform temperatures are maintained. Uniformity of temperature is highly desirable; in fact, it is well nigh essential to the maintenance of good health.

Too much should not be expected of a heating system in the matter of rapid temperature rise. But with such a modern device as the oil burner the custodian may expect to enter the building an hour or so before school time, and have all the rooms at the proper temperature on time.

An attempt at economy is often made by turning the thermostat down to a low degree during the night. It is not economical to have a low temperature at night because there is too much material, such as metal, concrete and plaster, which has to be reheated to the desired temperature. The schoolroom has vast window space, which causes a cooling of the room and its contents. A temperature of 60° F. should be the minimum during the night in the winter season. To teach all the rules of health and to follow but few of them is inconsistent.

In buildings using oil burners in which several custodians are employed, one of the men can be assigned to an early shift. The attention to the oil burner, while necessary, takes up little time and this man can carry out regularly scheduled work. The building is thus comfortable at the opening of the session at the expense of only a small amount of time.

Oil burners are of two types. The large burner is the rotating cup type for atomizing oil. It is the industrial type and uses the heavy, cheaper oils. For smaller buildings having not more than 7000 or 8000 feet of radiation the pressure atomizer type is universally used. This is the type used in domestic heating.

Whereas the industrial rotary type uses heavy oil, which must be preheated, the atomizer type uses No. 2 or 3 oil, which flows freely at any temperature. For buildings within the proper range, the smaller type is preferable because it lends itself to automatic control, requires no preheating, is cleaner and can be serviced by anyone familiar with domestic oil burners. Despite the fact that it uses higher priced fuel there are economies to offset this, such as the cost of preheating heavy oil, which is about three-quarters cent a gallon.

The pressure atomizer type is quiet, a distinct advantage in a small school in which the heating plant is near a classroom. Installation of the horizontal rotary burner is a specialized engineering feat and service is not readily available in a small community.

Usually the horizontal rotary type is manually operated. When it is not, a gas pilot light is used because the oil is too heavy to be readily ignited by the electric arc used in the pressure atomizer type. The fuel must be carefully ignited to avoid an explosion from an over supply of oil in the chamber. In the atomizer type this is automatically cared for the instant the vapor enters the chamber.

As a rule, in a building in which a burner has an intermittent load, such as a school building, the oil burner is found to be cheaper than other methods of heating. During the seasons of changeable weather more consistent temperatures can be obtained and the custodian is free to give greater service to the school.

Outline of a Plan for Play

THOMAS LYON WHITE

The first of a series of two articles about play areas for pupils of all ages by a member of the New York State Committee on Planning Physical Education and Recreation Facilities

THE ideal school play area does not exist in any standardized form. What may be ideal in one instance, surrounded by a given set of conditions, may lose its value when transplanted elsewhere.

That being the case, the ideal play area may be visualized as one that most completely meets the demands placed upon it by the physical education and recreation program needed in each particular instance.

In an attempt to provide facilities for this program we shall be governed by varying conditions. Those factors that must first be considered, once the basic program has been interpreted in terms of local conditions and needs, are the physical attributes of the site. Where is it located? What are its size and shape? Is it level or irregular in topography and what are the soil conditions? An approximation of the ideal area may be determined only by considering all phases of the problem.

A school plant is the outgrowth of an attempt to meet certain educational needs. Let us first examine those needs.

In New York State, for example, the regulations of the commissioner of education require elementary pupils to receive two hours a week of supervised physical education activities. In the secondary system this is increased to five hours of which at least one hour and one-half must be devoted to class instruction in a variety of activities. The remainder of the time is "to be devoted to the laboratory aspects of instruction as exemplified in athletic games and sports and other physical education activities." To provide facilities to meet this program there must be a careful study of land utilization for every school property.

In addition to the requirements of the physical education program there is a growing tendency to use these areas for general recreation purposes during the summer months. Many schools engage their physical education staff on a twelve months' basis, providing directed summer activities.

With the growth of these summer recreation programs under the direction of school officials comes a demand for facilities to meet the needs of adults. In every community there are groups of persons who seek the benefits of healthful physical activity and desire to make use of the school areas during early morning and late afternoon hours.

Basic program requirements must first provide for the primary and secondary physical education program and at the same time must meet the pupils' recreation needs. Second, they must give to the community facilities to meet the requirements of the adult population.

With the basic program determined, the next step is to examine and interpret it in terms of local conditions and particular needs. In our hypothetical problem we are to provide an adequate elementary school plant for approximately 200 pupils. Provision is to be made for grades 1 to 6 and for a kindergarten department for children of preschool age. At times the building will be used as a community center for local entertainments, social evenings and adult education classes.

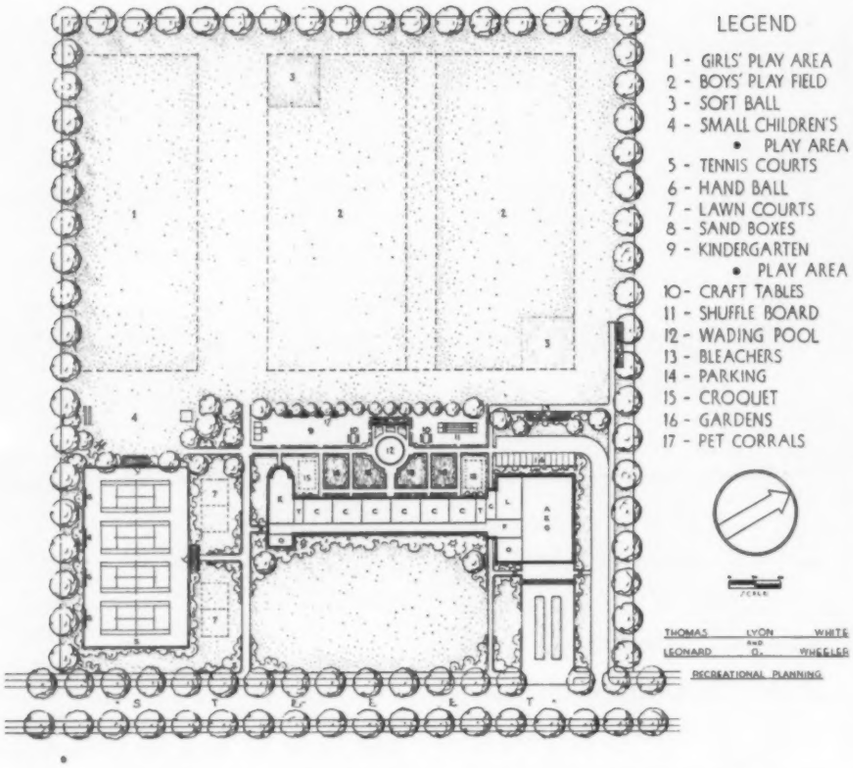
The building, a one story structure, is to be simple in layout, providing the usual classrooms, together with a combination auditorium-gymnasium. Provisions for buses will not be needed as the children live near by and walk to school. The homes from which the school population is drawn are for the most part average middle class. Parents of the children are the local business and professional people as well as workmen in various local industries.

The land on which the building is located is near the population center of the district and is slightly more than 10 acres in area. Since it is to serve adult and community needs as well as those of the school, sufficient land has been acquired. From the street and to the west the property has a slight rise which through grading operations can be made level. (If the rise were more pronounced, terraces would be introduced in order to produce level areas.) The plot has good top soil and is fertile and well drained. There are no unusual features to add to the cost of construction, such as outcroppings of bed rock or swampy hollows.

Knowing what is needed from the basic program down through the details of local conditions a solution can be advanced. It is shown in the design on the next page. It will be noted that the building is located slightly back from the street and north of the east and west axis of the property. By placing the building off center, the areas usually wasted at the sides are combined into one unit. This unit is frequently of such size as to provide space for important physical education facilities.

Care has been taken to see that sufficient space remains to provide a service drive as well as a parking area. The building itself approximates present day standards for orientation. Direct, simple walks and approaches as well as low open planting make for easy supervision by those in charge.

The physical education and recreation facilities necessary to meet the



PHYSICAL EDUCATION AND RECREATION AREA FOR ELEMENTARY SCHOOL GRADES ONE TO SIX

program of the school fall into several classifications. For ease and simplicity in discussion let us examine the kindergarten and small children's section first.

In the south end of the building is located the kindergarten. Children may pass directly from this section to the garden area and that portion of the playground reserved for those of preschool age. A pergola for shade, a wading pool which may be used for small sail boats, tables for the instruction of children's handcrafts and sand boxes provide for a diversification of activities.

The area for small children (older than kindergarten age) is reached by a walk and is located at the east end of the girls' field. Far enough from the building to eliminate objectionable noise, it is nevertheless accessible. Since it is a continuation of the girls' area, it is removed from proximity to the older boys' active games and sports.

The use of an undue amount of apparatus is not indicated. In a well-directed program of physical education and recreation the apparatus is largely used to fill the intervals between group games and activities. It is not meant that good apparatus has no place on the playground but rather that no amount of apparatus can take the place of qualified leadership and direction.

To the west of the school and occupying more than half of the total area is a large open playfield. Three divisions the size of a regulation football field are shown, although football is not necessarily a part of the program. However, it is desirable to provide ample space for large group games. Such activities as playground ball and softball, as well as soccer, field hockey and other similar team games, offer opportunity to develop an intramural sports program.

In order to provide equal facilities for girls, a separate section of the field is set aside for their exclusive use. By doing this, there is little danger of conflicting use of the facilities and the girls will develop a greater inclination to participate in active field games.

This large playing field, while caring for many games and sports and a correspondingly large group of pupils, can be one of the most attractive features of the school property. A large expanse of good grass turf permits the changing of game locations from time to time and eliminates the worn turf frequently encountered on smaller intensively used playfields. Simple border plantings of trees help to confine noise to the area while providing shade during warm summer days. Maintenance consists mainly of keeping the grass mowed, together with rolling and seeding of worn spots of turf.

Tennis courts occupy the section to the south of the building and adjacent to the small children's playground. Some may question the inclusion of four tennis courts on an elementary school property. A word of explanation may make clear the intent in developing such facilities.

If the courts are of the hard surfaced type, they provide an area for outdoor play that can be used for many court games after rains. By placing the net supports in sleeves they may be removed and such games as volley ball, paddle tennis, basket ball and badminton can be played. It is suggested that a system of court markings be worked out using different colors for different games. Introduced into the backstop netting of the courts are handball court walls which, if carefully designed, will not be unattractive.

Since a battery of four tennis courts is approximately the size of a regulation ice hockey rink, they should be designed for flooding during the winter months. As tennis courts, preferably lighted to provide night as well as day use, they provide community recreation for adults.

Attractive pergolas provide necessary shade for those who find it necessary to await their turn to use the facilities. Near the tennis courts are two grass courts for those games that are played on smooth grass areas.

The ideal plan for any area might be said to be the result of adequate, careful study on the part of those who are in charge of such a development. Well planned recreation properties do not just happen; there is no magic formula for their attainment. Formulate a program, one that consists of a clear, careful outline of the results desired, and with the help of those skilled in the solution of such problems work out a scheme and stick to it.

Out of 350 pupils in this elementary school, 250 buy their noon meal in the lunchroom. A choice of 5 and 10 cent plates is provided; also individual dishes. Those who bring lunches from home get a place at table, water and napkin.

Lunch in Tennessee

ANNA L. CARPENTER

HERE is a challenging job: the guidance of approximately 12,000 white children and 700 Negro children in their selection of food for the noonday meal. The department of education of Hamilton County, Tennessee, is aware of this problem and is at work on a long-time plan to provide for the healthful living of its children through nourishing school lunches.

This county, which includes Chattanooga, covers an area of 548 square miles and has 44 white schools and 12 schools for Negroes. In size the range is from one teacher to 25 teacher schools. Here are found children of parents working in industries and children coming from farm homes; children of land owners, tenants and mountain people.

The educational unit is the county. There are a county superintendent, a paid chairman of the board of education and five supervisors. Bus service carries children from 2 to 38 miles each way.

The school lunchroom is a part of the school system. The board of education furnishes space, light, heat and some equipment. The county supervisor of home economics serves as director of the lunchrooms. She is assisted by the school principals and teachers and by the local units of the parent-teacher association, who select the lunchroom managers.

The inability of some children to buy sufficient food has been partly met by a cooperative effort, the community canneries sponsored by the home demonstration department. Nos. 2 and 3 cans are contributed and pressure cookers and sealers are lent through the county officials. Fifteen canneries are operated to reach the entire county. The managers are appointed. The supervisor of the home economics department conducts a school for managers at the beginning of each season. Each cannery is checked by food inspectors.

These canneries, open to all families in the community, are operated on a toll basis. Each producer who wishes to take advantage of this service makes an appointment with the manager and, at the time set, brings her vegetables or fruits and assists in the canning. Her toll is 60 per cent of the total number of cans her products fill. Ten per cent of the canned goods is set aside for the manager of the cannery; 10 per cent, for the local school lunchrooms, and 20 per cent is distributed to schools where there are no community canneries.

Another source of help is the W.P.A. When a community cannot support a school lunchroom, a woman on relief, capable of doing the work, is permitted to operate one

under the joint supervision of a district supervisor and the county department of education.

Other means of obtaining financial aid are through interested individuals and community organizations. In one instance, a well-to-do community makes a contribution of $10 per month to a lunchroom in a poor community.

Since the employment of trained dietitians or managers is out of the question, steps are planned to give in-service training to those in charge of the lunchrooms. Twice each year, at the beginning and at the close of school, all managers are called to the department of education for a half-day conference. Under the leadership of the county director and with the help of specialists from the state home economics department and members of the county departments of education and health, problems are discussed and recommendations are made by managers and by those who are guiding them. Helpful materials are prepared and distributed. We are looking forward to the day when the length of this conference can be extended.

Safeguards Set Up

In order that children may be assured of protective foods and of sanitary conditions, certain critera have been set up. The manager becomes acquainted with these through the use of a score card posted in the lunchroom. From time to time, this score card is changed to meet the needs of the children. There is evidence of growth in the fact that managers are seeking help from home economics teachers and a few attend courses in nutrition at the vocational school.

Another safeguard for the protection of children is the requirement of a health certificate from each manager. A blood test is included in the examination. If the applicant cannot afford to pay for the examination, the county health department gives her free service.

Consideration is also given those children who bring lunches from home. At one time nutrition as a special subject was taught in all the white schools. This has been changed and attempts are now being made to integrate this information with the daily living of the children. The parent is included in the attempt to help the child choose foods wisely. A step has been taken in this direction in the organization of small study groups in a few local units of the parent-teacher association and in home economics groups. Here is an excellent opportunity for parent-child-teacher cooperation but the present working force is too small for follow-up of this activity.

Now for a picture of two of our lunchrooms. In one elementary school (grades 1 to 6) of 350 children, 250 buy a noon meal in the lunchroom. The room is large, well-ventilated and well-lighted. All the children who bring lunches from home pass through the lines with their grade groups, receive a glass of water, a napkin and have a place at the table. Some of these children supplement their lunch with milk.

The children move from their respective rooms in relays starting at 11:15 a.m. and closing at 12:30 p.m. About five minutes is used by each class in washing hands and in passing to the lunchroom.

Tables are arranged in four sections. There are 12 groups of children so each section is used three times. Each section has a monitor chosen by the children whose duty is to see that the tables and floor are left clean. Each teacher passes through the lines guiding her pupils in the selection of foods. She then sits at a table for teachers where she has thirty minutes' freedom from duty. Here you find a happy social situation with no undue haste.

Free Food From Profits

There is a choice of a 5 cent or 10 cent plate or of individual dishes. No candy is sold. Profit is returned to the lunchroom for equipment and to help feed those who are not able to buy food. The school and community have a parents' night supper to obtain money to make payments on the new equipment during the summer months.

Tickets are sold to all children but there are no marks on those given to the 10 to 15 children who receive free lunches. Six children are earning their meals by helping to serve and to wash dishes.

The manager and her two assistants receive a salary. The manager attends a class in nutrition at the vocational school during the summer.

A school principal describes a group undertaking in the following way:

"West View School is a two teacher school with an enrollment of 60 pupils from grades 1 to 6. It is located 14 miles from Chattanooga in a community in which the principal occupations are farming and dairying. A few of the patrons work in Chattanooga. The economic status of the patrons is about average for this section. Approximately one-sixth receive some government relief.

Hot Lunch Is Joint Project

"The West View plant is modern. The building is brick and the grounds are landscaped. There are two classrooms, an auditorium composed of two other classrooms joined by folding doors and a kitchen. The building has electricity, a water pumping system, drinking fountains and indoor toilets with lavatories. The kitchen is equipped with an electric range, a coal range and a sink. Tables for lunch are placed in the back of the auditorium which adjoins the kitchen.

"The pride of the school is its hot lunch project. This project originated in 1936 when the W.P.A. offered to furnish a kitchen worker and other assistance. The project has developed during the last two years and its present setup may be described as follows:

"The hot lunch project is under the joint sponsorship of the W.P.A. and the local parent-teacher association. The former has furnished two kitchen workers, about a thousand cans of vegetables, obtained as toll in a community cannery last summer, and occasional surplus commodities such as fruits and vegetables. The W.P.A. also helps in maintaining sanitary conditions in the kitchen and dining room and in supervising the kitchen help.

"The P.-T.A. functions through a hot lunch committee composed of the teachers and one parent (one of the kitchen workers). This committee formulates the policies and the working rules for the project.

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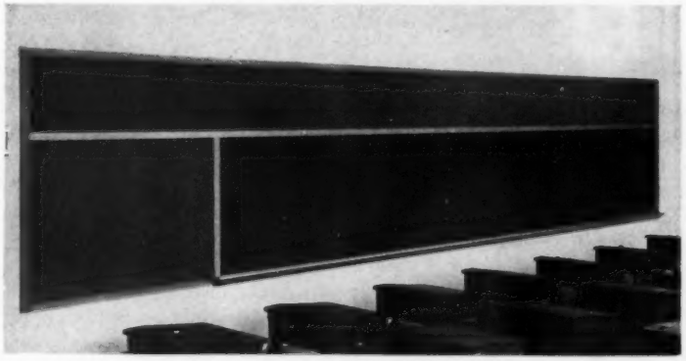

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"Every child in the school is served alike in the lunchroom without regard to his economic status. Each child is asked to pledge, individually or by family group, a certain amount per week according to his ability to pay. Pledges at present vary from a maximum of 55 cents a week for an individual to a minimum of 25 cents per week for a family group of three. The average weekly contribution per individual is 25 cents per week. This may be contributed in cash or in commodities.

"To make finances go as far as possible, certain convenient arrangements have been made for food purchasing. Day-old bread is obtained at 2½ cents per loaf. All groceries are obtained from a local grocer at cost. Milk is obtained from a local dairyman put up in half-pint bottles at 26 cents per gallon. This covers only the production cost of the milk and the dairyman does the bottling and delivering as a service to the school.

"Planning of menus, purchasing supplies, handling of monies and other contributions and the keeping of records are attended to by the pupils of grades 4, 5 and 6 as a part of their regular school work. This, of course, is done under the supervision of the hot lunch committee of the P.-T.A. and their teacher.

"The pupils spend approximately one hour each day in this activity. They are divided into rotating committees in order to handle the various phases of the work efficiently. The finance committee handles the daily contributions and keeps a daily cash and supply record. An auditing committee checks the finance committee and also prepares the permanent records to be submitted to the P.-T.A. The latter commitee's reports are posted in the lunchroom where any parent may inspect them.

"A meal planning committee prepares the menus and, with the kitchen workers, makes out the grocery order. There is a reading committee that studies nutrition in preparation for serving on the meal planning committee. A construction committee prepares menu posters. There are also two committees to supervise the handwashing before lunch. These committees see that there is a supply of soap and towels on hand, keep order in the line, see that each child pulls off and disposes of his towel properly and manipulates the soap shaker.

"A typical list of menus for a week follow:

Monday

Dried beans
Tomatoes *Kraut*
Whole wheat bread
Fruit salad *Milk*

Tuesday

Corn *Tomatoes*
Cornbread
Prunes *Milk*

Wednesday

Vegetable soup with beef stock
Bread pudding
Whole wheat bread *Milk*

Thursday

Stuffed eggs
Spinach
Whole wheat bread
Applesauce *Milk*

Friday

Creamed potatoes *Slaw*
Whole wheat bread
Oranges *Milk*

"The hot lunch committee from the first has maintained a policy of feeding all children, no matter how little they contribute and even if they do not contribute at all. Naturally some diplomacy and motivation devices have been necessary in some cases in order to get each patron to contribute according to his ability. The committee investigated the economic status of the few delinquents. A conference was held with the parents in order to fix the amount of the pledge. At present every patron in school has turned in a pledge. A serving of ice cream is given to each child who has kept up his pledge for the week on each Friday afternoon.

"On Fridays the finance and audit committees check all bills for the week, place the money to pay them in little bags and actually deliver the money in the afternoon. They sometimes find the grocer in error and duly correct his bills. The work of these committees makes arithmetic realistic and meaningful. The pupils like to deal with figures when they can actually handle the objects to which they apply."

FOOD FOR THOUGHT

Coffee Shop Orders

• The coffee shop that adjoins Hutchinson Commons at the University of Chicago is noted as much for being a student "hangout" as a school lunchroom. Here students congregate between classes to "cram" or to "jelly." It serves breakfast and a hot plate lunch at noon, but in the interim students drop in for "cokes" and coffee. Some students come merely to visit with their friends and do not order at all. The coffee shop is conducted as a campus institution and not as a tearoom.

For these reasons the management has abandoned the idea of giving tearoom service in the coffee shop. As each student enters he is given a blank order check. If he wishes to order, he writes the order on the slip and waves it in the air to attract attention of a waitress. If he does not order, he is still required to present the blank slip to the cashier as he leaves.

Nurse Is an Ally

• "Many teachers have found the nurse especially helpful in creating community interest in a school hot lunch program," says Ruth E. Grout writing in *Public Health Nursing*. "The nurse can promote the exchange of ideas between schools and can talk about the lunch program in homes. The need of a home vegetable garden large enough to furnish a year round supply of vegetables may perhaps be put across more convincingly if approached from the standpoint of furnishing food for hot lunches at school."

25 Charts, 25 Cents

• From the U. S. Government Printing Office comes an "Analysis of United States and State Standards for Fresh Fruits and Vegetables and Legal Standards for Dairy Products." This comprises 25 charts developed to provide pupils, graders, buyers for institutions, consumers and other interested persons, with a graphic presentation of the chief requirements of federal and state governments for fresh fruits and legal standards for dairy products. Copies may be obtained for 25 cents from the Superintendent of Documents, Washington, D. C.

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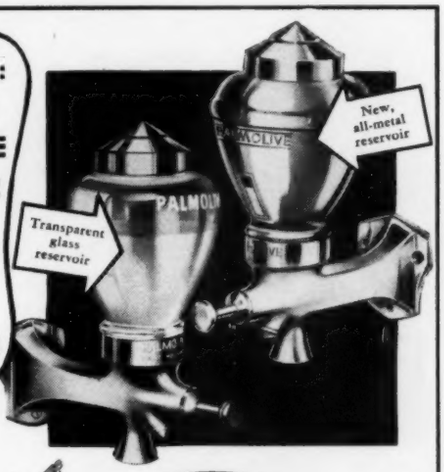

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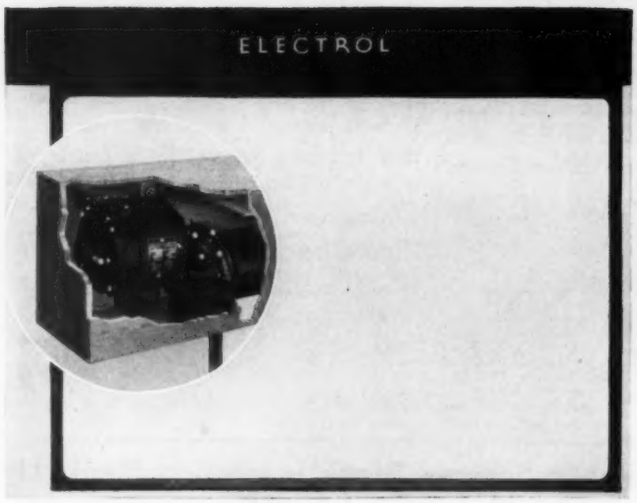
City's Progress Shown in Mural

PUPILS at the Austin High School, Austin, Minn., no longer eat their lunches in a room bereft of color or decoration. Guided by Gwenavere Nelson, art supervisor, talented pupils have completed a mural 4½ feet high and 60 feet long on one wall of the school cafeteria.

The mural depicts the progress of Austin. The design was developed and executed in the school's art department. Each pupil was given an individual portion of the mural to plan and work out from start to finish.

"There are rigid requirements to be met in the making of a mural," declares Miss Nelson. "Outstanding of these is a lack of perspective. When the eye follows the converging lines of perspective it distorts the appearance of the flat wall. Without doubt it sounds paradoxical, but to avoid distortion we have distorted perspective. We have tried to retain the flatness of the wall, an important requisite of a mural. It is not essential that there be any logical proportion in a mural."



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RCA Victor maintains an equipment recommendation service for the benefit and convenience of busy school executives. It is offered without charge or obligation and keeps you informed of new developments in the audio-visual field. If you would like this service kindly indicate it by checking on the coupon below the types of equipment and materials which interest you most. *(See numbers above).*

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The newest edition of the RCA Victor catalog, "Sound Service for Schools," describes in detail the many types of radio and sound equipment available for educational use. In addition, it contains many helpful hints designed to show you how this equipment may be used most effectively. You can get your free copy of this catalog by filling in the coupon below. Do it today.

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EDUCATIONAL DEPARTMENT
RCA Manufacturing Co., Inc., Camden, N. J.
A SERVICE OF THE RADIO CORPORATION OF AMERICA

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Please send me my free copy of the catalog "Sound Service for Schools." Also please send more detailed information about the services checked.

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School ..... *Position* .....

City ..... *State* .....

1	2	3	4	5	6	7	8	9	10	11	12	13	14

Modern schools *stay* modern with RCA Radio Tubes in their sound equipment.

BETTER PLANT PRACTICES

Black Paint Economical

Black paint, which is a ground color, often will last twice as long on outside fences as green or gray, according to a maintenance man who has given the subject close study. Patching and repairing is more easily done over black, eliminating entirely the use of red lead if it is done before deterioration and peeling begins. Outside window trims and fire escapes can be painted black effectively if they can be made to harmonize with the general color scheme. Black fire escapes, for example, are less noticeable, least costly to paint and the paint will outlast the others.

The same type and grade of paint, he adds, cannot be used for exterior and interior concrete and metals. It is better to consult a reliable paint manufacturer who will gladly furnish such information or even sample cans of paint for experimental purposes.

Back to the Soil

In school lawns, much depends on the nature of the soil. One authority suggests this simple method for testing its content: Take a sample of the soil, wet it thoroughly and roll it into a ball, exerting as little pressure as possible. Allow it to dry a couple of days under normal room conditions. Then drop the ball to a hard surface from a height of 3 feet. If it crumbles readily, it can be considered of good mechanical consistency. If it remains intact, there is too much clay in it. If it goes all to pieces, or crumbles in the hand, there is too much sand.

Should organic matter be required, there are several good sources. To quote from the same authority: "Some of the best are the green manuring crops. Rye sown in the fall and turned under in April when green and succulent will add considerable humus. A crop of soybeans sown in late spring will likewise add a substantial amount of humus. They should be turned under about August 1, while green, and the area cultivated for about a month. This allows sufficient time for decomposition and for the seed bed to settle before fall seeding.

"Ordinary farm manure is an excellent source of organic material. It will greatly improve soil, if applied at the rate of ½ ton or 1 cubic yard to every 1000 square feet. Its chief disadvantages are its inevitable content of weed seeds and its scarcity.

"Peat is another well-known source of organic material. Imported peat seems better for soil improvement as it decomposes more readily than domestic peat since it is made up of mosses rather than a mixture of roots, twigs and leaves. It is best to allow about a month for the peat to decompose in the soil prior to the time of seeding. If this is not possible, the bales of peat may be exposed to the weather. This is important because baled peat is dry and if mixed into the soil in that state, it will pull moisture out of the soil."

Fire Checkup

Last month the self-inspection blank developed in Milwaukee for the school plant in general was published. Below is the self-inspection blank for the school stage in the Milwaukee schools.

Milwaukee Public Schools' Stage Inspection Blank

Class: Senior.....; Junior.....; Junior Trade.....; Name of School.....

	Yes	No
1. Has this stage a smoke vent extending through the roof?		
Do the release lines terminate in a "chopping cord" on a "chopping block"?		
Where is chopping block located?		
Is block equipped with hand axe or hatchet?		
With a sign "In case of fire, chop the cord"?		
How many fusible links on the release lines?		
How many vent doors can be opened manually for normal ventilation?		
2. Has this stage an asbestos curtain? (Check type below)		
One-piece to pull all the way up...; folding type...; two-piece.....		
Does the asbestos curtain slide in a steel smoke channel?		
If not, how much overlap past the proscenium opening?.....inches.		
Is the curtain equipped with auxiliary weights to cause it to descend automatically: (1) by the melting of fusible links on the control lines?		
(2) by manual release of the control lines?		
Can the curtain be released manually from either side of stage?		
Describe exactly how manual release is effected		
Are there sand boxes to catch auxiliary weights when dropped?		
Has the curtain limit chains which stop the top of curtain in descent 12 inches above proscenium?		
3. Is the stage equipped with two firemen's pike poles?		
Where located?		
Is stage equipped with two firemen's axes?		
Where located?		
Is stage equipped with two portable soda-acid fire extinguishers?		
State type and capacity and where located:		
Have the fire extinguishers been recharged within the last year?		
Are safety devices and fire-fighting apparatus always clear of scenery?		
4. Is the wood framework of sets painted with flameproof paint?		
Is all other woodwork on stage painted with flameproof paint?		
Have fabric curtains, borders, etc., been flameproofed within the last two years?		
Are fabric borders kept a safe distance from border lights?		
What protection is there against borders charring and igniting?		
5. Has the stage a grid?		
Are any railings or toe-boards necessary to prevent objects from falling from grid, flies or stairs down on the stage floor?		
Is the stage switchboard operator protected from falling objects?		
6. Are all doors from stage metal-clad or steel:		
Exceptions:		
7. Is the stage free of flimsy electric wiring and "five-and-dime" apparatus?		
8. Is the stage area free of accumulation of discarded scenery and properties?		
Is a high standard of housekeeping maintained on stage, scenery docks, property store rooms and stage crew quarters?		
9. Are fire drills held for the training of the stage crew?		
10. Who is the instructor in charge of stage?		
Was he present at this inspection?		
11. Have you observed any hazards not covered in this inspection blank?		
12. Have you any remarks? (Use reverse side)		

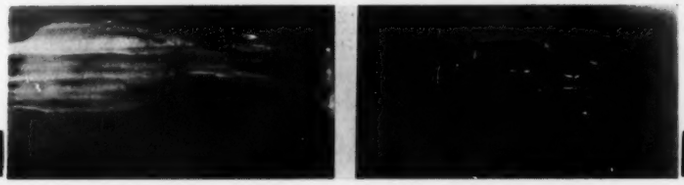
Signed by:

....

Principal or his representative Engineer-Janitor *Date*.....193..

Reinspection Referred to:..... *Report Rec'd*.....*by*..... Bureau of Bldgs. and Grounds Rec'd by Secretary

Why MIDLAND EV-R-GLO WAX CAN SAVE YOU $$ ON WAX COSTS



The above photographs (unretouched) illustrate why **EV-R-GLO** floors last longer. Note (left photo) how water has re-emulsified and removed the coating of high-grade emulsion wax while same amount of water has merely remained on the surface of **EV-R-GLO** (right photo).

- **CUTS COSTS . . . . . .**
  . . . by eliminating frequent costly re-waxing
- **LASTS LONGER . . . .**
  . . . since it is not removed by water-mopping —very durable.
- **SAVES TIME . . . . . .**
  . . . because it dries with a polish and is easily maintained.

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CUTS SLIPPING TO A MINIMUM

EV-R-GLO
CAN BE USED ON PRACTICALLY ALL FLOORS

School Business Officials Have Biggest Show and Modern Slant to Program

THE biggest show in its history coupled with a program keyed to modern trends won new laurels for the National Association of Public School Business Officials. Registered membership at Chicago, the scene of the twenty-seventh annual convention, was the highest yet recorded, and there was no doubt in anyone's mind that the exhibits, some seventy-seven in all, attractively displayed in the Palmer House, surpassed all previous showings. Everyone was enthusiastic — members, guests and manufacturers — and predicted increasing national interest in this annual event.

It was a happy impulse that prompted President Russell W. Hibbert and his associates to select as the general convention theme, "Modern Trends in School Business Management." Speakers carefully selected to participate in the program approached the subject from many different angles. Trends in school building problems, in school finance, in school feeding and community relations were clearly outlined in general sessions as well as sectional meetings, comprising a crowded program that kept the visitors busy from early morning until late at night.

Today's Requirements

What are some of the requirements essential to the successful operation of schools in this country today? The question was answered as follows by Arthur B. Moehlman, professor of school administration and supervision, University of Michigan, and editor, The NATION'S SCHOOLS.

1. A system of public schools relatively free from the hampering and selfish restrictions and exploitation by partisan politics and pressure groups, including the school personnel in the latter group.

2. A system free and open to all in accordance with their ability to profit from participation in the educational program, or the actual equalization of educational opportunity extended, however, to include not only the conventional equalization of tax burden but equalization of instructional program and equalization of the ability of the individual to participate.

3. A system of public education that is thoroughly integrated from the preprimary years through the university.

4. A system that is free to grow in accordance with changing social needs.

5. A system of public education that is more functionally related to the democratic culture of which it is an integral part.

6. A system that provides for rational security of personnel in the exercise of their civil rights and in their positions during efficient service.

7. A system that can meet its continuing demands through assurance of a reasonably stable and adequate income over a period of time.

Greater flexibility is a major trend in education, according to Paul J. Misner, superintendent of schools, Glencoe, Ill. "This trend is sometimes popularized," he stated, "by saying that we are attempting to adjust the school to the child, rather than the child to the school." Antiquated budget systems, development of the community school and the tendency to give the pupils greater opportunity to do and to make were stressed as subjects of particular importance. Mr. Misner urged "that unity of purpose be sought through the wider participation of pupils, teachers and community adults in the administration of the educational program."

In discussing school and community relations as a coordinate part of school business administration Dr. Ned H. Dearborn, dean, division of general education, New York University, emphasized that business management is essential to effective educational effort.

"Your work is so significant," he told the business officials present, "that it may deservedly be called professional. The demands of production require of you sound educational standards that your services may sustain, and protect, the educational interests of the schools."

Building Field Needs Research

Social and economic trends as they affect education were considered by Newton Edwards, department of education, University of Chicago. "The time has come," Doctor Edwards said, "for a rethinking of our national educational policy. Inequalities of educational opportunity in this country constitute a challenge to American statesmanship. Education can be made a force to equalize the condition of men; it is no less true that it can be made a force to create class, race and sectional distinctions."

That the school building field needs research was plainly indicated by T. C. Holy, Ohio State University. Doctor Holy explained that probably there was no enterprise in American life affecting the lives of nearly thirty million school children and annually costing the taxpayers of the country nearly three quarters of a billion dollars that is conducted so largely on judgment and opinion as is the school plant.

Trends in financing school plant construction are definitely toward federal aid, according to Raymond V. Long, director, school buildings, State Department of Education, Richmond, Va. There is a growing tendency on the part of the states as well, he pointed out, to assume responsibility not only in financial support but in studying and analyzing the educational needs of local communities.

What are the trends in school building construction? Alfred C. Lamb, superintendent, buildings and grounds, Wayne University, Detroit public schools, answered this in general terms as follows: "The greatest advance in the construction of school buildings of modern times has been the designing of these buildings to fit the school curriculum. We no longer construct buildings for school use and turn them over to a principal and staff of teachers with instructions to conduct school. Teachers, principals, supervisors, directors and the entire staff are first consulted as to the requirements of a physical plant to fit the curriculum that is to be taught."

Improving Lunch Choices

What are the trends in school feeding? Every new development in nutrition that is of practical value to human health should be applied to school feeding, according to Mrs. Ethel Martin, director of nutrition service, National Dairy Council, Chicago. "All sound health education methods," she added, "should in some way be adapted for use in improving the selection of school lunches."

A plea for the full realization of the opportunities for cooperation, correlation and direct education that the school lunch project offers was made by Evelyn Smith, assistant professor of institution management, University of Illinois. "It is a challenge to us to grasp these opportunities," said Miss Smith, "and we can do this if we maintain the proper physical conditions, if we work out an understanding consideration of the educational and financial policies and if the school lunch is directed by an interested, well-trained and experienced manager."

What are the trends in school finance? "Financial economies can be obtained through improved business administration without affecting the educational return to the students." This was the statement of J. Wilbur Wolf, Omaha, Neb. To this he added, "Carry your accounting system on a commitment basis and not on an expenditure basis." Mr. Wolf also predicted that eventually we are all coming to property accounting.

Philip J. Hickey, secretary and treasurer, board of education, St. Louis,

(*Continued on page* 85)

SAVE SIGHT—GET MORE LIGHT

IT'S LIKE cutting bigger windows in your walls when you hang "Tontine" cloth shades. They're so clear and translucent that *more* daylight streams into the classrooms. And their cool colors so evenly diffuse the daylight that all eye-straining glare is held out.

"Tontine" shades are available in several different styles and serviceable colors. The type pictured is particularly well-suited for classroom use as the shades can be lowered or raised from either the top or bottom.

Soap and water makes these *cloth* shades as clean as new. Rain won't hurt them. Sunshine won't fade them. They won't crack, fray or pinhole. And they're amazingly economical. We'll be glad to hang a sample "Tontine" shade for your inspection.

Laboratory tests of translucency reveal: "Tontine" No. 500 Snow White transmits 73% more light than a similar color in painted cloth. "Tontine" No. 508 After Glow Gray Green transmits 140% more light than a similar color in painted cloth.

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NEWBURGH NEW YORK

With a Hammond Organ in your band every section is strong

Fenger High School Orchestra, Chicago, Ill., Neil Trimble, Director

● The perpetual difficulty of every school band or orchestra director—an unbalanced ensemble—is being solved in many schools with a Hammond Organ. Is your woodwind section weak this year? The Hammond Organ gives you oboe and clarinet tones to bring the volume up to any level desired. In the same way, the Hammond also supplements any other section of your orchestra and, in addition, gives you that extra volume you always need for climaxes.

Furthermore, the Hammond is ideal for all auditorium purposes—assemblies, rallies, community sings, accompanying glee clubs, furnishing the music and sound effects for school plays and operettas. Being easily portable, it can be transferred to any part of the school; it quickly becomes such an integral part of the life of a school that you wonder how you got along without it!

For more complete information regarding the use of the Hammond Organ in schools and colleges, see your nearest Hammond dealer. Or write The Hammond Organ, 2975 N. Western Avenue, Chicago.

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"I had never dreamed it might be possible for any instrument to have tone colors of such character and variety as to blend both acoustically and musically so perfectly with the timbre of the violin.

"The Hammond Organ, I believe, thus fills a unique place in the instrumental family."

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EASIER
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Classroom of the Bethesda-Chevy Chase High School, Bethesda, Md., is made quieter, brighter, more attractive with a ceiling of Armstrong's Corkoustic.

WHERE classrooms are quiet, the speed and accuracy of learning increase noticeably. Discipline improves. Teachers and pupils are free from the nervous strain of distracting noise.

That is why many modern classrooms are being quieted with Armstrong's Corkoustic ceilings. Corkoustic soaks up sound the way a blotter soaks up ink. It reduces noise approximately 50%.

Corkoustic helps protect eyesight, too. Its pleasing texture and decorative colors have high light-reflection value, which makes classrooms brighter.

Corkoustic is a natural insulator. It keeps rooms warmer in winter, cooler in summer. It is sanitary and easy to keep clean because it does not absorb dust and dirt. Repainting is seldom necessary more often than once every six to ten years.

Corkoustic can easily be installed over your present ceilings. Use it in classrooms, auditoriums, offices, and cafeterias—wherever noise-reduction or acoustical efficiency is important. For full information, write for "How to Reduce Noise." Armstrong Cork Products Company, 1234 State Street, Lancaster, Pennsylvania.

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CORKOUSTIC
for noise-quieting and acoustical correction

NEWS IN REVIEW

Semi-Centennial at "Georgia Tech"

By Frank Pierrepont Graves

An important anniversary was celebrated last month by the Georgia School of Technology. This was the semi-centennial of the foundation of that famous institution. On Oct. 8, 1888, the first hundred students gathered around two small buildings on a minute campus on the outskirts of Atlanta. Since that early day the property of "Georgia Tech" has steadily expanded until it now embraces nearly fifty acres of valuable city land, upon which 27 handsome structures have been erected at a cost of more than three million dollars. In the place of the dozen or so members with which the institution started, the faculty now numbers approximately two hundred, and the student body, though most carefully selected before admission and required to maintain the highest standards during the course, has long since passed beyond the four thousand mark.

At first Georgia Tech afforded instruction only in mechanical engineering, but in the intervening years there have developed broad and thorough courses, graduate as well as undergraduate, in a dozen other lines of engineering. Likewise five year "cooperative work" has been developed, whereby a much more practical training is afforded and hundreds of ambitious students have been enabled to earn their way through college. The scholastic standards in existence here have recently received marked recognition through the selection of Georgia Tech, together with Harvard, Yale, Northwestern, Washington and California, as a station for the R.O.T.C. naval training. Moreover, a decade ago the Guggenheim Foundation, when making large gifts for the establishment of a few schools of aviation, chose Georgia Tech as the most suitable location in the South on the strength of its high record for scholarship. Little wonder, then, that the institution is now generally referred to as "the foremost school of engineering in the South" and that students are flocking to it from 40 states and from every section of the Union.

Nevertheless, Georgia Tech is but a typical product of the material and educational progress that Atlanta and its environs have been making during the past half century. Reduced to ashes in 1864, this "Empire City of the South" has arisen like Phoenix from the flames. Within the past half century it has become one of the leading railroad centers of the country, famed for its manufactures, commerce, newspapers, schools and colleges. Within range of the city are no less than ten colleges and universities. Among these are such institutions as the attractive Emory University, more than a century in age, the influential Atlanta University for the education of Negroes, the well-known Agnes Scott College for women and this conspicuous School of Technology.

Few people in other sections of the country have been able to realize the magnitude of this development. It has, therefore, seemed appropriate for a New Yorker who was present at the "golden jubilee" of Georgia Tech to give some account of the institution and of such a happy occasion. Most of the state officials and some representatives of the national government took part in the celebration, and delegates from 200 colleges and universities were present.

Governor Rivers gave his idea of "What Georgia Tech Means to the State of Georgia," President Brittain gave a cordial and witty welcome, Chancellor Sanford of the University System of Georgia spoke in his usual classic style, and a New York educator delivered the occasional address.

Among those introduced to the audience were the governor of Puerto Rico, who is a native of Georgia, and the representatives of several foreign governments and universities. The invocation was offered by the Episcopal bishop of the Atlanta diocese, and the chairman of the board of regents of the University System presided most happily. An afternoon tea was given at the governor's mansion the day before the commemoration exercises, luncheons and a football game with Notre Dame occurred after the program, and dances took place at the auditorium building and the fraternity houses in the afternoon and evening.

ADMINISTRATION

Closes 300 One Room Schools

The closing of approximately 300 one room schools during the last year will effect a savings of $220,000 a year and provide improved educational facilities to some four thousand pupils, according to Director E. N. Dietrich of the Ohio State Department of Public Instruction. This leaves Ohio with

1200 one room schools having an enrollment of 30,000 and brings the total of pupils being transported to schools to more than 300,000.

Knoxville Clothes Needy

Free clothing is being provided nonrelief clients of schools, ages from 6 to 17 years, who are recommended by authorized investigators of the child personnel department (attendance department) of Knoxville, Tenn. Attendance officers, nurses, principals and social welfare chairmen of the P.-T.A. make the investigations.

In the past when each school provided for its own needy children and each agency in the city could be called on for help, charity was being duplicated and many unworthy cases were being served.

In 1937 an old school building was opened as headquarters, garments were gathered from prosperous families, laundries and dry cleaning companies donated free service and a group of W.P.A. workers was gathered to remake the old garments. The child personnel department handles this service with the use of one paid clerk.

BUILDINGS

High School for Homemaking

Continuing its policy of expanding the city's vocational school facilities to meet increases in enrollment in this division, the New York board of education has approved general plans for a new high school for homemaking to be constructed in Brooklyn at a cost of $1,100,000. The new building will accommodate 2685 pupils.

The board also approved the appointments of 665 new teachers to regular positions, a list said to be the largest number of teachers to be named while school was in session in recent years.

Hurricane Batters School

The Field Grammar School of Leominster, Mass., probably may have to be rebuilt as a result of the hurricane that severely battered the East Coast. The building was ordered closed until it could be inspected. It was found that the side walls were dislodged from 3 to 4 inches.

Boy's Footprint Is Clue

Pupils of the Ramona Grammar School at Norwalk, Calif., believed they would start to school on September 12. But one little boy with a size 4 shoe knew better.

For at 5 a.m. on Sunday, the day before school was to open, he set a fire that leveled the main building. That's what investigating authorities have declared and they have sufficient evidence to support their theory. Dried grass and burned matches supplied clews. And the clear imprints of a size 4 shoe were discovered near three other points where fires had been kindled but had failed to ignite outlying buildings.

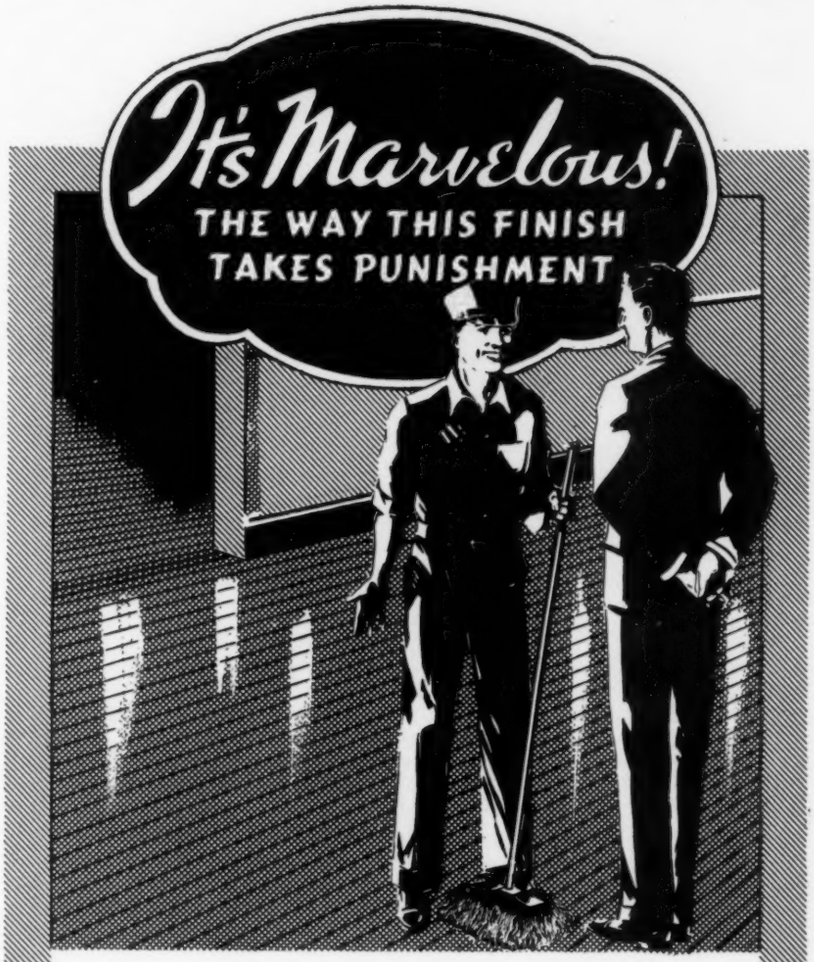
Loss of the building was estimated at $10,000, with another $10,000 worth of furnishings going up in flames.

County Supt. A. R. Clifton has placed the children in other schools.

VISUAL EDUCATION

Nonvocational Course

A course in motion pictures and radio, a unique offering on the secondary level, is being given this semester at Western High School, Detroit. Nearly all of the reference material has been obtained directly from the industries concerned. Rate cards, trade journals, coverage maps and sales surveys are among the mate-



On corridor, classroom or gym floor, Seal-O-San continues to win laurels as the long-wearing, inexpensive finish. That is why superintendents in more than 4200 schools have Seal-O-San floors. Once applied, Seal-O-San lasts for years. It penetrates deeply into the wood fibres . . . actually *reinforces* the wearing surface. Moreover, an occasional sweeping with a dry mop keeps a Seal-O-San floor clean and beautiful. Remember Seal-O-San. It's the one floor finish that gives *more* wear.

The HUNTINGTON LABORATORIES Inc.
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LONG-WEARING SEAL AND FINISH

DESIGNED to bring the proved advantages of educational 16 mm. sound motion pictures within comfortable reach of *every* school, the new "Academy" Filmosound 138 embodies all the features essential to a school projector. Because controls not essential in school service have been eliminated, the "Academy" can be offered at this amazingly low price. And this same simplicity makes the new projector easier to operate!

Although new, the "Academy" is thoroughly time-tried, for it is basically the same as the Filmosound 138 used for years by hundreds of schools, and by the hundreds by great manufacturers.

In classroom or moderate-sized auditorium, the "Academy" offers faithful sound reproduction with ample volume, and the same steady, flickerless projection common to all Filmosounds.

Just glance at these features. Projects both sound and silent films. Has "blimp" case for quiet operation, speaker-hiss eliminator, "floating film" protection, 750-watt lamp, and 1600-foot film capacity. Complete in two light, easily portable cases, only $298. Convenient terms available. Write for details. There are other, more powerful Filmosounds, too.

Select from Thousands of 16 mm. School Films

No matter what types of school movies you need, it's a thousand to one the Filmosound Library can supply you. Educational films on most subjects. Latest feature pictures from Hollywood. Cartoon comedies. Choose for rental or purchase from a complete, up-to-date list. Write for Filmosound Library Catalog. Bell & Howell Company, Chicago, New York, Hollywood, London. *Established 1907.*

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rials being used. The course does not approach the subject matter from a vocational standpoint but rather attempts to give the pupil a concept of the magnitude and workings of these two fields. Visits to local radio stations and motion picture studios and use of the high school's complete visual education and radio equipment will supplement regular classroom procedures.

U. S. D. A. Film Strips

Prices for film strips issued by the U. S. Department of Agriculture for the fiscal year 1938-39 are lower than those that were in effect last year, according to an announcement made recently by the extension service of the department.

Prices for film strips until June 30, 1939, will range from 45 to 65 cents each, depending upon the number of illustrations in the series. The majority of the 300 series that the department has available will sell for 45 or 50 cents each.

Film strips are available on such subjects as soil conservation, farm crops, dairying, farm animals, farm forestry, plant and animal diseases and pests, roads, farm economics, farm engineering, home economics and adult and junior extension work. Lecture notes are provided with each film strip purchased, with the exception of those that are self-explanatory.

A list of available film strips and instructions on how to purchase them may be obtained by writing to the extension service, U. S. Department of Agriculture, Washington, D. C.

Sound Film Library

The Central Washington College of Education, Ellensburg, Wash., has installed a subscription library of 16 mm. sound films, involving an investment of approximately $4000, to service the school systems of central Washington. This service is under the direction of E. L. Muzzall, director of public service and former superintendent of schools, Toppenish, Wash.

Grants to Council on Education

In May 1936, the General Education Board granted $25,000 to the American Council on Education for a program to encourage the use of motion pictures in education. With these funds, the council sponsored an initial inventory of equipment needed for visual education in schools and made an intensive review of literature in the field. Two other grants, totalling $141,000, also have been made to the council for use over a three year period in the further development of its motion picture program, it is announced in the 1936-37 annual report of the General Education Board, which has just been published.

The council's work in this area is now directed primarily toward (1) describing the functions of and needs for motion pictures in general education and (2) facilitating the reorgan-

Films for the School Screen

American History—3. Expedition to the West (East of Mississippi)

Chronicles of America—History series of the Yale University Press: Vincennes, 3 reels; Daniel Boone, 3 reels; Frontier Woman, 3 reels; Alexander Hamilton, 3 reels. 16 and 35 mm., silent. For rent or for purchase. Yale University Press Film Service, 386 Fourth Avenue, New York.

Louisiana Purchase and Lewis and Clark Expedition — Causes and immediate results of the purchase; animated maps showing commercial situation of 1800; the route taken by Lewis and Clark traced by motion pictures and animated maps of the territory. 1 reel. 16 and 35 mm., silent. For rent. Society for Visual Education, Inc., Dept. M.P.W., 327 South La Salle Street, Chicago.

Settling the Ohio Valley — Problems of pioneers; stockades against Indian attacks; early homes, mills and stores; animated maps of Northwest Territory, its division and occupation; routes followed by "companies" that settled the territory before 1790; scenes along the Mississippi. 1 reel. 16 mm., silent. For rent. Society for Visual Education, Inc., Dept. M.P.W., 327 South La Salle Street, Chicago.

Star Spangled Banner — Highlights in the career of Francis Scott Key from boyhood to his imprisonment on a British frigate when he wrote the poem which has become the national anthem. 1 reel. 16 mm., silent. For rent. Edited Pictures System, Inc., Dept. I.E.P., 330 West Forty-Second Street, New York, or Wholesome Films Service, Inc., 48 Melrose Street, Boston.

In the Days of Wooden Ships and Iron Men — Clipper ship era. 1 reel. 16 mm., silent. For rent or for purchase. Kodascope Libraries, Inc., 33 West Forty-Second Street, New York.

A *Practical* DESIGN . . . *Economical* TOO!

THE Heywood S 704 is a sturdy, well designed chair desk which provides ample working surface; correct posture; flexibility of arrangement . . . all at a truly economical cost.

THIS chair desk is but one of the many scientifically designed units now available in Heywood-Wakefield School Furniture. *We shall be pleased to send you a complete catalogue* as well as a special circular showing many exclusive Heywood construction features. *Just drop a note* to our Gardner, Mass. office.

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PROMPT care is important in preventing infected wounds. Even minor wounds may become infected when antiseptic treatment is delayed. Children and adults report injuries promptly when Mercurochrome is used, because treatment is not painful.

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is non-irritating and exerts bactericidal and bacteriostatic action in wounds. Be prepared with Mercurochrome for the first aid care of all minor wounds and abrasions. In more serious cases, consult a physician.

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)

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WINSTON FLASHES

DRY FARMING in the classroom? You can demonstrate its basic principle with a few lumps of sugar and a little ink, by following the fascinating exercise given in COMMERCE AND INDUSTRY OF THE WORLD, one of our new "Units in Social Studies" workbooks. These brand-new books contain many unique activities, problems, and exercises that emphasize the commercial and industrial aspects of geography.

NOVEMBER is the birth month of five Presidents.

"DESPATCH is the soul of business." So Lord Chesterfield advised his son 200 years ago. To keep pace with the speed of modern business, up-to-date applications of this maxim are used throughout the many texts in the WINSTON COMPLETE COMMERCIAL PROGRAM.

EUCLID'S pupils probably worked out their geometry problems on a smooth surface of sand, spread on the floor.

ACCOMPANYING any basic text or in themselves, THE NEW CURRICULUM WORKBOOKS IN ARITHMETIC, by Brueckner, Anderson, Banting, and Merton, contain a complete presentation of every important step in arithmetic for Grades 2 to 8, arranged to correlate with the modern scientific grade placement of arithmetic topics. Their many outstanding features also include provision for testing and remedial work.

NEWS of Franklin's achievement, the treaty of French alliance with the new United States, took over two months to reach our shores.

3,000,000 unwritten words (on the basis of the old Chinese proverb) can be credited to the 3000 illustrations in the WINSTON SIMPLIFIED DICTIONARY, Advanced Edition. No wonder it has been hailed as the most valuable single reference book for schools ever published.

V. Q., or vocabulary quotient, may well be a standard in measuring one's chance for success, since studies show that the size of a man's vocabulary and of his salary are in direct ratio.

The JOHN C. WINSTON COMPANY
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ization of general education through the use of the motion picture and allied visual aids.

A special staff is organizing a review and appraisal of available educational films. Experimental centers for the study of technics in the use of educational films will be sponsored and a series of institutes and conferences will report results of these activities to teachers and school administrators.

RADIO

Crisis Into Classroom

"Bring the world crisis into the classroom" is the suggestion of John W. Studebaker, U. S. commissioner of education, who is one of the outstanding exponents of the idea of making education vital for young people by bringing the more crucial questions into the classroom for examination by the pupils.

"It is worth any trouble it takes to rearrange and organize the high school or college schedule these days to enable pupils to hear first hand the most important pronouncements being made by history-making leaders. Certainly if radio broadcasters can interrupt profit-making schedules to substitute numerous noncommercial news releases portraying up-to-the-minute changes in world history and

On the Air During November

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Monday

2:30-3:00 p.m.—American School of the Air, "Frontiers of Democracy" (CBS).
5:45-6:00 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).
6:00-6:15 p.m.—Science in the News (NBC Red).
9:00-9:30 p.m.—Dorothy Thompson (NBC Red).
10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

11:30-11:45 a.m.—General Federation of Women's Clubs, consumers' program (NBC Red).
2:30-3:00 p.m.—American School of the Air, "The Music of America" (CBS).
2:30-3:00 p.m.—NBC Music Guild (NBC Blue).
5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).
6:00-6:15 p.m.—Science in the News (NBC Red).
7:45-8:00 p.m.—The Roving Prof. William Montgomery McGovern discusses little known sidelights of life around the globe (NBC Red).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association.[2]

PERSONAL HEALTH SERIES

Nov. 2—Healthier Boys and Girls.
Nov. 9—Healthful Play.
Nov. 16—Weather and Wearing Apparel Ventilation.
Nov. 23—Rest, Relaxation and Recreation.
Nov. 30—Tuberculosis and the Teens.

2:30-3:00 p.m.—American School of the Air, "The Lives Between the Lines" (CBS).
5:45-6:00 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).
6:00-6:15 p.m.—America's Schools, dramatizations tracing growth and development of the nation's school system, Belmont Farley, narrator (NBC Red).
7:30-7:45 p.m.—Living History, CBS adult education series.
7:45-8:00 p.m.—Science on the March, under auspices of the American Society for the Advancement of Science (NBC Blue).

Thursday

2:30-3:00 p.m.—American School of the Air, "This Living World" (CBS).
4:00-4:15 p.m.—Of Men and Books, Prof. John Frederick of Northwestern University reviews books and interviews guest authors (CBS).
5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).
6:00-6:15 p.m.—Operalogue broadcasts of the Metropolitan Opera Guild, designed to aid radio audiences in enjoying opera broadcasts (NBC Red). Begins November 24.
8:30-9:30 p.m.—Rochester Philharmonic Orchestra with Jose Iturbi as conductor will be heard on November 3 and 17, December 1, January 12 and 19, February 9, March 2 and 16 (NBC Blue).
8:30-9:15 p.m.—Eastman School of Music Orchestra under the direction of Dr. Howard Hanson and Paul White will be heard on November 10, December 8 and 15, January 5 and 26, February 2, 16 and 23, March 9, 23 and 30, April 6, 20 and 27 (NBC Blue).
10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs, CBS adult education series.

Friday

2:00-3:00 p.m.—Walter Damrosch Music Appreciation Hour (NBC Blue).
2:30-3:00 p.m.—American School of the Air, "New Horizons" (CBS).
5:45-6:00 p.m.—"So You Want to Be a ——." A child interviews representatives of various professions, *i.e.* reporter, policeman, sea captain (CBS).
7:15-7:30 p.m.—Music Is My Hobby (NBC Blue).
7:15-7:30 p.m.—National Youth Administration (NBC Blue).
7:30-7:45 p.m.—Adventures in Science, Dr. Lawrence Kelso Frank, sociologist, commentator, CBS adult education series.

Saturday

10:30-10:45 a.m.—The Child Grows Up (NBC Blue).
10:45-11:00 a.m.—Florence Hale's talks, directed to parents, explaining methods of classroom procedure so that education may continue at home as well as in school (NBC Red).
11:00-11:30 a.m.—No School Today, a new safety program for children (NBC Red).
12:00-12:30 p.m.—NBC Music Guild (NBC Red).
8:30-9:00 p.m.—Original Plays (NBC Red).
10:00-11:30 p.m.—NBC Symphony Orchestra under direction of Arturo Toscanini (NBC Blue).

Sunday

12:30-1:00 p. m.—University of Chicago Round Table (NBC Red).
1:00-2:00 p.m.—Great Plays, masterpieces of the drama (NBC Blue).
Nov. 6—Doctor Faustus.
Nov. 13—Midsummer Night's Dream.
Nov. 20—Julius Caesar.
Nov. 27—Othello.
Dec. 4—The Cid.
Dec. 11—Life Is a Dream.
Dec. 18—Bourgeois Gentilhomme.
4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institute (NBC Red).
6:00-6:30 p.m.—Music for Fun (CBS).
6:00-7:00 p.m.—New Friends of Music concerts broadcast from Town Hall, New York, continuing until February 19 (NBC Blue).
8:00-8:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

[1] Except Sunday.

[2] Owing to program conflicts, there will be no Chicago broadcast of the network program. Instead, a recording of the program will be broadcast over Station WENR at 8 p.m. each Wednesday.

QUALITY SEATING As IRWIN Builds It

Note the structural superiorities of the No. 192 Chair shown opposite. They're typical of the extra quality you will find in all IRWIN Seating.

1. Frame is heavy, hot rolled, angle-shape steel. 2. Continuous angle-steel supports double-riveted to posts, provide rigid re-inforcement to all four sides of desk. 3. Front, bottom, rear and side panels are 20 gauge steel, firmly welded to frame. 4. Heavy, angle-shape, steel braces provide maximum support to all four corners of top, prevent sagging. 5. Desk top adjustable to four levels, at ¾" intervals, securely attached to desk frame. 6. Non-marring, oval-shape glides formed out of leg itself. 7. Form-fitting, plywood seat bolted to frame with rust-proof, smooth-head bolts. 8. Posture-shaped back slats, riveted to back posts with rust-proof, smooth-head rivets. 9. The split-proof, plywood desk top is rigidly attached to top braces by nine wood screws.

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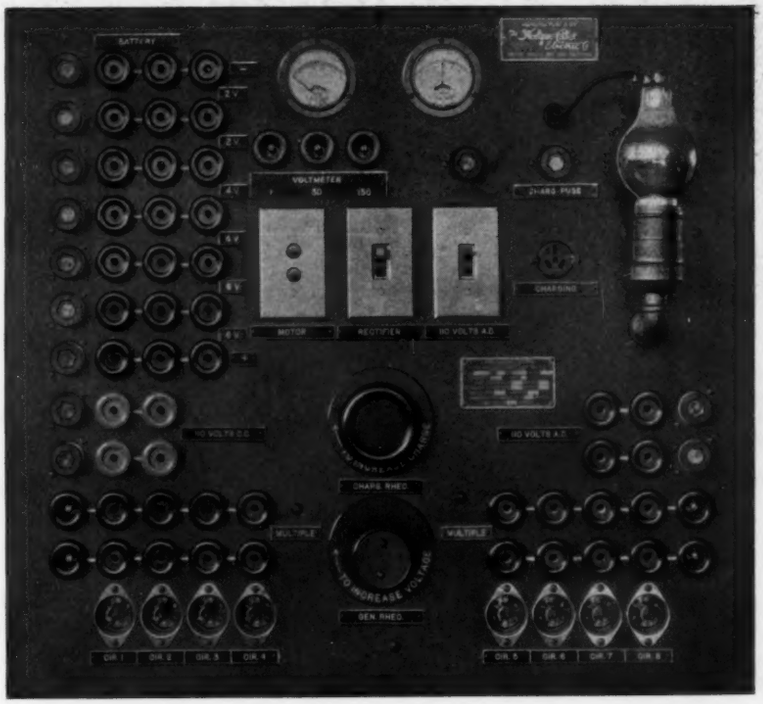

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Since 1913, Holtzer-Cabot current distribution panels and electrical equipment have been widely used in school and college laboratories. They are universally recognized as highest grade and are specified by those who demand the BEST.

if newspaper representatives can stand by in the four corners of the earth during every hour of the day and night to supply accounts of personal observation of swift-moving world events, those of us in organized education who have not already done so should be able to adapt our traditional schedules to the most vital influences available for educational uses."

Major in Radio

Drake University this semester has increased the number of radio subjects to eight and with allied courses in liberal and fine arts completes a four year major course in radio. The Drake school of radio has moved into new completely equipped studios in Carnegie Hall on the campus.

South Carolina Radio Project

A statewide radio project for South Carolina, to be sponsored and conducted by the extension division of the University of South Carolina, has been approved by the U. S. Office of Education. The project will have as its primary purpose distribution of material for radio broadcasting to schools throughout the state. Commissioner Studebaker has announced that $3,658 in W.P.A. labor has been appropriated for the project through February 28. Scripts for radio broadcasts will be prepared under the project and all types of South Carolina material will be compiled and prepared at the request of the schools.

"No School Today"

"No School Today," a new program for children, is being broadcast from 11 to 11:30 o'clock on Saturday mornings to urge children to "play safe" whenever they are on the street.

Doctor Angell to Speak

Dr. James Rowland Angell, N.B.C. educational counselor, will be the featured speaker at the opening of the second annual Southern Conference on Audio-Visual Education, November 10, at Atlanta.

N. E. A. Programs

Dramatizations of the growth and development of the nation's school system will be heard from 6 to 6:15 p.m. each Wednesday over the NBC Red network in a program series entitled "America's Schools." Belmont Farley, director of public relations for the N.E.A., will be narrator.

Another series, also sponsored jointly by NBC and the N.E.A. comprised of talks by Florence Hale, editor of the *Grade Teacher,* will be broadcast from 10:45 to 11 a.m. every Saturday. Miss Hale's talks are aimed principally at the parents of school children. They are intended to explain the methods of classroom procedure to parents in order that education may continue at home as well as in school.

TRANSPORTATION

Award Bus Drivers Certificates

Two hundred thirty-two Iowa school districts have filed with the state department of public instruction the names of 1318 school bus drivers who are entitled to receive certificates for careful driving during the last school year. The plan is to be continued again this year, as reports from all sections of Iowa indicate that this plan has been a great help in the safety education of bus drivers.

Oklahoma Tests Its School Buses

Last year 351 school buses were found to be in dangerous condition when inspected by the Oklahoma patrol

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and safety department. Buses were assembled at central points most convenient to the drivers in their respective counties, and while the patrol was examining the vehicles the drivers underwent oral and road test examinations. Those who passed were given certificates of qualification. No fees were charged. Buses failing in safety requirements this year are to be forced out of operation.

MEETINGS

Attendance Officers Convene

"Sociological Aspects of School Attendance" was the theme of the National League to Promote School Attendance when it convened for its twenty-eighth annual conference October 24 to 27 at the Mayflower Hotel in Washington, D. C. Martin M. Hihn, director of attendance bureau, Baltimore, presided. There were several speakers of prominence on the program.

Timely Topic

Mostly timely on the program of the American Vocational Association convention in St. Louis, November 30 to December 4, will be the subject of vocational education. All branches of the work, agricultural, commercial, home economics, part-time, industrial arts and industrial education, as well as related subjects of vocational guidance and rehabilitation, will be represented. A three day meeting of the National Association of State Directors of Vocational Education will precede the general convention.

Educational headquarters for the convention will be the Herbert S. Hadley Vocational School. Delegates also will visit the city's three ninth grade vocational centers.

Coming Meetings

Nov. 2-5—Wisconsin Education Association, Milwaukee.

Nov. 3-5—Iowa State Teachers' Association, Des Moines.

Nov. 3-4—Arkansas Education Association, Hot Springs or Little Rock.

Nov. 4-5—Conference of Food Service Directors, Rochester, N. Y.

Nov. 4-5—Kansas State Teachers' Association, Kansas City, Topeka, Salina, Hays, Garden City, Hutchinson, Wichita and Pittsburg.

Nov. 6-12—American Education Week.

Nov. 10-11—Delaware State Education Association, Newark.

Nov. 10-12—New Jersey State Teachers' Association, Atlantic City.

Nov. 14-17—National Council on Schoolhouse Construction, Frankfort, Ky.

Nov. 16-19—Missouri State Teachers' Association, Kansas City.

Nov. 17-19—Louisiana Teachers Association, Baton Rouge.

Nov. 18-19—Conference, International Border Region, Progressive Education Association, Windsor, Ont.

Nov. 20-21—New York State Teachers Association, Albany.

Nov. 20-23—South Dakota Education Association, Mitchell.

Nov. 22-25—Virginia Education Association, Richmond.

Nov. 24-26—Texas State Teachers' Association, Dallas.

Nov. 24-26—National Council of Teachers of English, St. Louis.

Nov. 25-26—Idaho Education Association, Boise.

Nov. 25-26—National Council for the Social Studies, Pittsburgh.

Nov. 30-Dec. 3—American Vocational Association, St. Louis.

Dec. 1-3—Arizona Education Association, Phoenix.

Dec. 2-3—New England Association of Colleges and Secondary Schools, Hotel Statler, Boston.

Dec. 27-29—Ohio Education Association, Columbus.

Dec. 27-29—Pennsylvania State Education Association, Harrisburg.

Dec. 28-30—Illinois Education Association, Springfield.

Dec. 28-30—Oregon State Teachers Association, Portland.

Feb. 25-March 2—American Association of School Administrators, Cleveland.

March 23-25—Georgia Education Association, Atlanta.

April 10-14—Association for Childhood Education, Atlanta, Ga.

A NEW AMPRO DEVELOPMENT

A Sound-On-Film Arc Model, providing five times the brilliance of a 750 watt projector. Ideal for large auditoriums where the utmost of illumination is required. Has numerous special features.

Quality SOUND-ON-FILM PROJECTORS ARE NO LONGER EXPENSIVE!

During the past two years due to increased demand and production there has been a *decline* in the list prices of high grade sound projectors. With Ampro there has also been a corresponding *increase* in the efficiency of sound models. Those who have been interested in sound films, but who have hesitated because of the previous high cost of good projection equipment, should familiarize themselves with the new low prices and new Ampro units. The coupon below will bring full details—promptly.

Ampro Prices Reduced

Effective September 12th, 1938, Ampro announced a still further price reduction in its complete line of Silent, Sound-on-Film and Convertible Models.

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PRECISION CINE EQUIPMENT

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Gentlemen: Please send me the 1939 Ampro Catalog with complete description, illustrations and prices of

- ☐ Silent Projectors
- ☐ Sound-on-Film Projectors
- ☐ Silent Models Convertible into Sound
- ☐ New Ampro Arc Sound-on-Film

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Ontario Group Will Be Hosts

For the first year the Ontario group of the International Border Regional Branch of the Progressive Education Association will act as hosts for the conference November 18 and 19 at Windsor. The theme of the conference will be "Building an Education for the Needs of the Individual."

PUBLICATIONS

Youth Today

An illustrated digest of the month's best reading for young people made its appearance on the newsstands soon after the opening of school in September. The magazine is called "Youth Today" and is edited by Harry Miller. It is designed to bring "good reading within easy reach of young people and to serve as a forum in which youth can express its innermost thoughts."

Home Contacts Bulletin

When the 6 year old comes trudging home from his first day of school in the system of Knoxville, Tenn., he has clutched in his little fist a small pamphlet that the teacher has instructed him to "take home to father." This booklet contains a message for parents, phrased to gain their cooperation because of the interest it expresses in the child on the part of the school.

Pacific Bibliographies

Pacific House on the exhibition grounds of the Golden Gate International Exposition in San Francisco Bay will symbolize the integration of Eastern and Western cultures.

For the study of the contributions of Pacific cultures and resources to contemporary civilization, a bibliography has been published on the junior college and high school levels, which is intended to indicate the wealth of material for assigned or supplementary reading.

Copies of this bibliography may be obtained at 5 cents a copy from the Department of the Pacific Area of the exposition.

Teachers Write Bulletin

Each year a committee of the Detroit Teachers Association publishes an American Education Week bulletin for parents and pupils. This year's bulletin was distributed on October 17. It tells of plans for the week, gives suggestions for open house, sets down pertinent facts about Detroit schools and the cost of running them.

FINANCE

Vote to Equalize State Aid

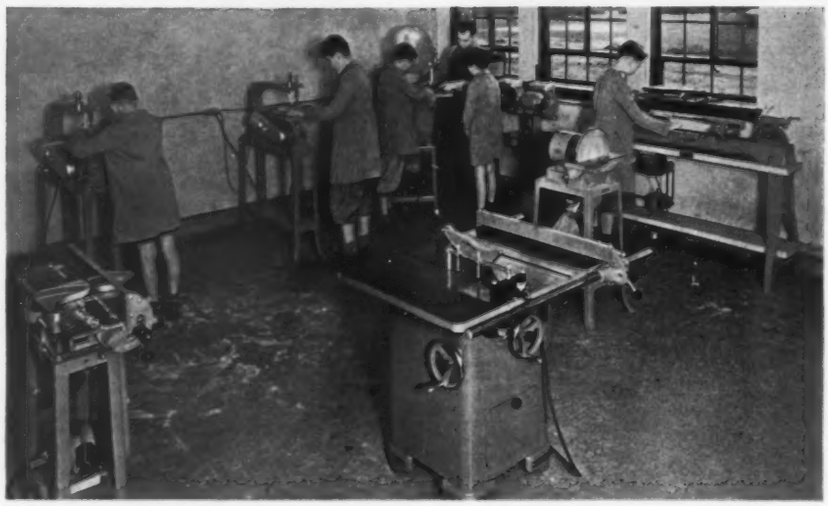
Citizens of Florida will vote at the November elections on an amendment to the state constitution that provides for equal consideration in state school support. This amendment is the result of a state supreme court decision of a few years ago which held that state offices and institutions are the state's primary obligations and that the support of public schools is the obligation of the counties. The amendment is proposed to change this and to give public schools an equal consideration in state support.

America's "White Spot"

Nebraska's program of self-eulogy in a national magazine, daily newspapers of the state, Sunday spots on radio programs and publicity releases to business executives does not stand up under scrutiny, according to Farnsworth Crowder writing in the *Survey Graphic* for October.

Armed with facts from Nebraska schoolmen, Mr. Crowder shows how

NEW "Low Cost" TOOLS
for School Shops



More and more, modern school shops are being equipped with "low cost" light power tools such as Delta makes. Every educator concerned with vocational and technical training should be fully acquainted with this new trend in shop equipment. The arguments for these new type tools are overwhelming. Consider them: *Low first cost*—from one-third to one-tenth of heavier equipment; *Low maintenance cost*—a fraction of that of heavy machines; *Compactness and flexibility*—they occupy less space and can be adapted to fit the needs of any school shop. *Splendid safety features*—Delta light power tools are provided with safety guards that meet the strictest requirements; *Maximum "after graduation" value*—Delta tools are used by thousands of industrial plants from the largest to the smallest—by hundreds of thousands of home workshop owners. Students are thus trained to use tools that they will operate when school days are over.

If you are in any way concerned with the problem of equipping school shops—send for the new 1939 Delta Catalog TODAY. It gives facts, figures and performance records of other schools that you will find of great interest.

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meagerly education is fed by Nebraska, the self-styled "white spot of the nation." While total expenditures for state government have gone up 106.5 per cent, expenditures for schools have declined 34.2 per cent.

The state's educational bill per pupil in 1935-36 was not only far beneath her ability but it was $12.95 under the national average. In the important matter of state aid, Nebraska rates forty-third among the states.

The average annual salary of teachers in Nebraska (as of November 1937) was $772, which is $511 under the national average. This is lower than in any state except the two Dakotas and seven states in the Deep South. The median rural salary for 76 counties was $31.48 a month.

In Omaha the picture is no better than in the rural districts. A tabulation of maximum high school salaries paid in 91 large cities of the country finds Omaha down in the eighty-ninth place. In the matter of elementary school salaries it is in eighty-third place.

The Nebraska constitution provides that license monies, state and municipal, shall be appropriated exclusively for education. It is said that revenues from only four of 54 state license, permit and registration fees go into the school purse.

The *Survey* article also charges that Nebraska institutions are dilapidated, farmers are overburdened and relief is insufficient.

PERSONNEL

Hold Teachers' Conference

This year Omaha held its second annual fall conference on instruction during the first three days of the opening week of school. On the first day a general assembly of all teachers was addressed by Supt. Homer W. Anderson regarding "Rights and Privileges of the Child in School." The next two days all teachers participated in building meetings in the morning and general assemblies in the afternoon. The original conference was an outgrowth of the delay in opening Omaha schools last year by the city health department.

Three Point Ruling

A recent opinion issued by the attorney general of Ohio rules that local boards of education can establish a retirement age for teachers but that the retirement clause will not interfere with existing contracts. In a three point ruling the following points are stressed: (1) teachers have no vested rights in teaching positions after expiration of the period for which they were hired; (2) local boards can adopt a policy of refusing appointments or reappointments of any teachers more than 65 years of age, and (3) such policy as may be adopted by school boards does not affect teachers who are 65 or more and who have unexpired contracts.

DISASTER

Explosion Injures Forty

Slight injuries were sustained by 40 pupils and 50 others were shaken when an air compressor tank in the basement of the Frankville Elementary School, Frankville, Wis., exploded, October 18. A safety valve that failed to release allowed the pressure in the tank to reach extreme limits, according to newspaper accounts.

The explosion wrecked the interior of the school and the tank was driven through a 12 inch wall. Windows and walls were shattered. A piano and other equipment were destroyed.

The injured pupils were largely those who occupied the room immediately over the tank. A few required medical attention and the rest were sent to their homes.

Choose Furniture that "Lets Your School Grow"

Handle Maximum Enrollment and Larger Classes without Handicapping either Teacher or Student

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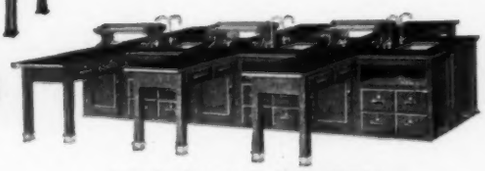

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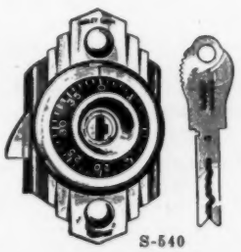

S-540

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NAMES IN NEWS

Superintendents

JOHN E. JONES, former principal of the Washington School, Cudahy, Wis., began the new school term as superintendent of Cudahy schools, succeeding J. R. BRANDSMARK, now superintendent of the county home for dependent children at Wauwatosa, Wis.

D. PAUL WITMER, building designer for the Hershey estates, has been selected as superintendent of the Hershey Industrial School, Hershey, Pa. The 44 year old former carpenter and draftsman was chosen by the board of managers to succeed GEORGE E. COPENHAVER, who died last spring. He becomes the second superintendent since the school was founded in 1909. The school now has enrolled 1000 orphan boys, living on a 10,000 acre farm.

H. D. MCEACHEN, school superintendent at Neligh, Neb., has resigned to become president of the junior college and superintendent of schools at Monnett, Mo. His successor at Neligh is F. DON MACLAY, who has been principal of the high school for five years.

G. F. MADDOX has been elected superintendent of schools at Pavo, Ga.

JOHN L. SULLIVAN, formerly of Pittsburg, Okla., is the new superintendent at Crowder, Okla.

D. F. R. RICE has resigned as superintendent of schools at Beloit, Wis. He will spend the year completing work for the Ph.D. degree at the University of Wisconsin. VICTOR F. DAWALD has been chosen acting superintendent at Beloit for one year.

H. E. PECK, former principal, Geneva High School, Geneva, Ohio, has been chosen city superintendent of schools.

HUBERT L. MOTT, former superintendent of schools at Seneca Falls, N. Y., has been appointed to fill the vacancy left by the resignation of REQUA T. BELL as superintendent at Pleasantville, N. Y.

L. O. LITLE is the new superintendent of the school district of North Kansas City, Mo.

Principals

CARL M. DIEFENBACH has been appointed supervising principal of schools, Collingswood, N. J., to succeed JOHN B. RITTER. Mr. Diefenbach has been superintendent of schools at Putnam, Conn., for seven years. He will take up his new position in February.

C. E. LAPRAIRIE has been named principal of New Orleans Academy, New Orleans, to succeed the late CAPT. ROBERT PERRIN.

PRINCIPAL JOHN M. LOUGHRAN of Samuel J. Tilden High School, New York, will head the new Christopher Columbus High School, the Bronx, when it opens in February.

HARRY B. SUTTER has resigned as principal of the junior-senior high school at Webb City, Mo., to accept a position as high school principal at Wakefield, Mich. GEORGE AMOS, head of the science department, has been named principal at Webb City.

ELLEN B. ANDREW is the new principal of the Kilgour Public School, Cincinnati.

WILLIAM HOWELL has been appointed principal of Coloma School, Sacramento, Calif., to succeed WILLIAM BURKHARD, now assistant to JAMES F. BURSCH, assistant city superintendent of schools.

WILLIAM C. GAIGE has taken up his duties as principal of Pembroke High School, Plymouth, Mass., following a six year teaching period at the high school, North Quincy, Mass.

EDGAR G. JOHNSTON, principal, University High School, Ann Arbor, Mich., is on a year's leave of absence to accept an appointment as field representative for the Cooperative Study of Secondary Schools.

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Irvin R. Byrum, high school principal at Huntsville, Ind., has accepted a teaching position in the Franklin D. Roosevelt Junior High School, Compton, Calif.

T. Wilson Cahall has been appointed head of the high school at Federalsburg, Md., to succeed T. Conover Crouse.

Paul C. Garrison, former teacher at Huntingburg and Cannelton, Ind., has been chosen principal of schools at Franklin, Ind.

Gordon O. Thayer has succeeded A. Philbrook Daggett as principal of Norwell High School, Norwell, Mass.

Perry H. Benson is the new principal of the Tehachapi Valley Union High School, Bakersfield, Calif.

Charlotte C. Tennant, the first new principal of John Howland School, Providence, R. I., in twenty years, was greeted in a festive way when school opened in September by parents and children.

Everett H. Colbert has been appointed principal of the Charles Turner Open Air School, St. Louis.

Curtis Gentry, supervisoi of guidance, has been made supervising director of secondary education at Knoxville, Tenn. Roy Anderson, supervisor of elementary education, has been made supervising director of elementary education. These two offices are virtually equivalent to assistant superintendencies.

Mrs. Frances Lanyon has been appointed supervising principal of Selma Olinder School and of Lowell School, of which she is now principal, at San Jose, Calif.

Albert A. Witson is the new principal of the Eron Preparatory School, New York City.

State Departments

D. H. Dabelstein, for the last two years supervisor of vocational rehabilitation in the schools at St. Paul, Minn., has been appointed director of vocational rehabilitation and special education in the Minnesota State Department of Education.

Glen Featherston, superintendent of schools, Huntsville, Mo., has been named director of the research division of the Missouri State Department of Education to succeed Dr. Arty Smith, who resigned to accept a position at Phillips University at Enid, Okla.

Harley Wooden has been appointed assistant superintendent of public instruction in Michigan.

R. M. Garrison of Belleville, Ohio, has accepted an appointment as state high school supervisor, succeeding Dr. G. H. Reavis, who resigned to become director of instruction for the Cincinnati schools.

Dr. Harlan H. Horner will retire January 1 as associate commissioner and acting assistant commissioner for higher professional education in the New York State Education Department.

In the Colleges

Dr. Guy Stanton Ford, dean of the graduate school, was elected president of the University of Minnesota on October 19. He is 65 years old. Under the compulsory retirement rule, he will be retired in three years, when he reaches 68.

Dr. John Owen Gross, since 1929 president of Union College, Barbourville, Ky., has been elected president of Simpson College, Indianola, Iowa.

Dr. John R. Emens, deputy state superintendent of public instruction for Michigan, has accepted an appointment as associate professor of education, Wayne University, Detroit.

Walter E. Clark, president of the University of Nevada, retires because of ill health on November 1 after twenty-one years of service. He has been named president emeritus.

Brother A. Victor, F.S.C., is the recently installed president of Man-

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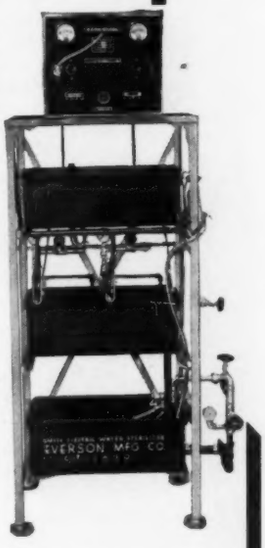

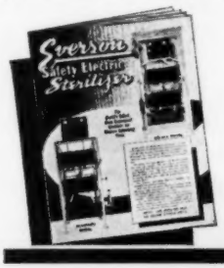

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hattan College in New York City.

MAJOR J. A. DAY, principal of the junior high school at Fort Smith, Ark., is the new president of Henderson State Teachers College, Arkadelphia, Ark.

DR. WESLEY EARL ARMSTRONG, head of the school of education at Mills College, has been granted a year's leave of absence to accept a position on a committee of the American Council on Education. The committee will make a five year study of teacher education in the United States. DR. KARL BIGELOW of Columbia University has been appointed chairman of the committee. The third member has not been announced.

DR. WILLIAM S. TAYLOR, dean of the college of education, University of Kentucky, has returned from a year's leave during which he made a study of administrative education in England and on the continent.

HUGH M. MILTON, dean of engineering, New Mexico College of Agriculture and Mechanic Arts, State College, N. M., has been appointed president of that institution.

DR. STANLEY B. NILES has accepted the presidency of the Iowa Wesleyan University. He is a former member of the Albion College faculty.

DR. EARL MARTIN is the new acting president of Anderson College, Anderson, Ind., replacing DR. JOHN A. MORRISON, who was granted a leave of absence because of illness.

REV. HUGH J. RHYNE is the new president of Marion Junior College, Marion, Va.

DR. FREDERICK PISTOR, Newark, N. J., has been elected principal of the elementary training school at New Mexico State Teachers College, Silver City, to succeed H. T. BAWDEN, who resigned to take a position on the faculty of Ohio Wesleyan University.

DR. TRACY F. TYLER, for five years secretary and research director of the national Committee on Education by Radio, has been appointed lecturer in the college of education of the University of Minnesota.

DUDLEY DOOLITTLE, former congressman and former general agent of the Farm Credit Administration, has been named acting president of the College of Emporia, Emporia, Kan. He succeeds DR. JOHN BAILEY KELLY, who resigned to become pastor of the Georgetown Presbyterian Church, Washington, D. C.

DR. I. M. ALLEN has resigned as superintendent of schools at Highland Park, Mich., to become a member of the teaching staff at Western State Teachers College, Kalamazoo, Mich.

Miscellaneous

DR. FRANKLIN DUNHAM, N.B.C. educational director, has been made an honorary fellow in Trinity College of London. The award probably will be bestowed in New York next spring.

GEORGE G. MALCOLM, superintendent of schools at Sault Ste Marie, Mich., was elected president of the department of city superintendents of the Michigan Education Association recently. E. D. WILLMAN of Owosso was elected vice president. SIDNEY MITCHELL, Benton Harbor, and MALCOLM ROGERS, Zeeland, were named to the executive committee.

FRANK B. HINES JR. is the new head of the lower school at the Columbus Academy, Columbus, Ohio.

GEORGE MITCHELL JR. is the new headmaster of the Low-Heywood School, New Canaan, Conn.

JOHN R. GREGG was the guest of honor at a dinner given in New York on October 13, celebrating the fiftieth anniversary of the invention of Gregg shorthand.

Deaths

JOHN K. BOLEN, assistant superintendent in the New York City school system, died recently of heart attack. Mr. Bolen had been working on a

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DR. WILLIAM RABENORT, assistant superintendent of schools in the Bronx, New York City, died recently following a fall in his summer home at Beacon Beach, N. J.

HERMAN HORTON, president elect of the Eastern Kentucky Education Association and superintendent of schools, Carter County, Kentucky, died recently.

HERBERT S. CARTER JR., since 1925 headmaster of the Harvey School at Hawthorne, N. Y., died at his summer home at Martha's Vineyard, Mass., after an illness of several months.

MARGARET P. RAE, for more than 40 years a teacher and during the last ten years assistant superintendent of schools in charge of two school districts in Brooklyn, N. Y., died at the age of 62 years.

MONTGOMERY C. SMITH, superintendent of schools in Hudson, N. Y., since 1922 died at his home at the age of 60. Before going to Hudson, Mr. Smith served eighteen years as superintendent at Goshen, N. Y.

CHARLES EDWARD RUGH, professor emeritus of education at the University of California, Berkeley, died recently in San Francisco at the age of 71 years, following an attack of pneumonia.

THE BOOKSHELF

SCIENCE IN GENERAL EDUCATION. *Report of the Committee on the Function of Science in General Education. Commission on Secondary School Curriculum. Progressive Education Association Publications. New York: D. Appleton-Century Company, Inc.,* 1938. *Pp.* xiii+591. $3.

Arresting presentation of the orientation of science to the problems of living. Should have a deep influence in secondary school practice.

PHILANTHROPIC FOUNDATIONS AND HIGHER EDUCATION. *By Ernest Victor Hollis. New York: Columbia University Press,* 1938. *Pp.* x+365. $3.50.

Definite contribution to the analysis of the contributions of a relatively new institution—the philanthropic foundation—in higher education.

HUMAN AFFAIRS, 1938. *By Porter Sargent. Boston: Porter Sargent,* 1938. *Pp.* 224. $0.50 *(Paper Cover);* $1 *(Cloth).*

Collections of selected quotations and many pungent observations on things educational by a mature rationalist who frequently pokes good natured fun at bunk in high places. Interesting reading.

DIRECTING LEARNING. *By Robert W. Frederick, Clarence E. Ragsdale and Rachel Salisbury. New York: D. Appleton-Century Company, Inc.,* 1938. *Pp.* xvi+527. $2.75.

Textbook for teacher training institution emphasizing the study-learning concept in classroom direction.

MODERN SECONDARY EDUCATION. *Principles and Practices. A Revision of "Secondary Education." By Aubrey A. Douglass. Boston: Houghton Mifflin Company,* 1938. *Pp.* xviii+782. $3.

Revision of a good secondary education text in principles and practices.

THE FOUNDING OF AMERICAN CIVILIZATION: THE MIDDLE COLONIES. *By Thomas Jefferson Wertenbaker. Illustrated. New York: Charles Scribner's Sons,* 1938. *Pp.* xiii+367. $3.

Story of the merging of six and possibly seven cultures to produce the American culture as it grew in the middle colonies. A reconstruction of

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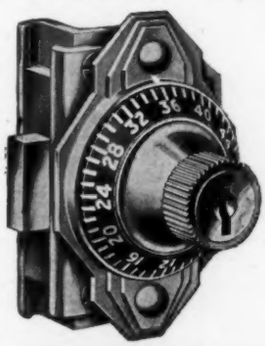

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SUPERVISION IN THE ELEMENTARY SCHOOL. *By Samuel Smith and Robert K. Speer. New York: The Cordon Company,* 1938. *Pp.* 460. $2.90.

Text for training schools and reference book for superintendents, principals and supervisors covering practical problems in elementary supervision.

THE SCHOOLMA'AM. *By Frances R. Donovan. New York: Frederick A. Stokes Company,* 1938. *Pp.* xii+355. $2.50.

An experienced teacher gathers in readable form her generalizations of the American public school teacher in relation to her job and her place in the community.

SCHOOL TRANSPORTATION. *By Asael C. Lambert. Stanford University: Stanford University Press,* 1938. *Pp.* xiv+124. $3.

In which the author presents much worth while information concerning transportation, together with an outline of what he considers to be a sound program.

CREATIVE WAYS FOR CHILDREN'S PROGRAMS. *By Josephine Murray and Effie G. Bathurst. New York: Silver Burdett Company,* 1938. *Pp.* xiv+396. $2.40.

Worth while suggestions for progressive teachers in elementary education with respect to many aspects of program making and executing. Extensive bibliography.

THE NEW PLAY AREAS: THEIR DESIGN AND EQUIPMENT. *Edited by George D. Butler for the National Recreation Association. New York: A. S. Barnes and Company,* 1938. *Pp.* xiii+242. $3.

Much needed presentation of practices and tendencies in the development of modern play areas. Valuable as reference text for courses in school buildings and also for superintendents of schools.

AN ANALYSIS OF PRESENT PRACTICES IN CITY ATTENDANCE WORK. *Doctoral Dissertation. By Joseph LeMart Schultz. Gettysburg, Pa.: Times and News Publishing Company,* 1938. *Pp.* xi+188. $1.50 *(Paper Cover).*

Detailed study of better city school attendance practices. Of real interest both to superintendents and attendance officers. A contribution to research in child accounting.

TEACHING LITERATURE. *A Handbook for Use With the "Literature and Life" Series. By Dudley Miles and Robert C. Pooley. Chicago: Scott, Foresman and Company,* 1938. *Pp.* 248. *Free to Users of "Literature and Life." (Paper Cover.)*

Comprehensive guide for the secondary school literature teacher.

PRACTICE IN PRESCHOOL EDUCATION. *By Ruth Updegraff, Helen C. Dawe, Evaline E. Fales, Bernice E. Stormes and Mary G. Oliver. First Edition. New York: McGraw-Hill Book Company, Inc.,* 1938. *Pp.* xvi+408. $3.

Description of work in the State University of Iowa experimental preprimary school that adds considerably to the valuable literature growing out of laboratory experiments in this new area.

NUTRITION IN HEALTH AND DISEASE. *By Lenna F. Cooper, Edith M. Barber and Helen S. Mitchell. Seventh Edition, Revised. Illustrated. Philadelphia: J. B. Lippincott Company,* 1938. *Pp.* xvi+708. $3.

Seventh revision of a standard text for courses in nurses' training schools.

OBJECTIVES AND PROBLEMS OF VOCATIONAL EDUCATION. *Edited by Edwin A. Lee. Second Edition. New York: McGraw-Hill Book Company, Inc.,* 1938. *Pp.* x+476. $3.50.

Might be labeled "Twenty Years Later," as this second edition of a capably written book really describes the objectives and problems of vocational education after two decades of federal participation in this program.

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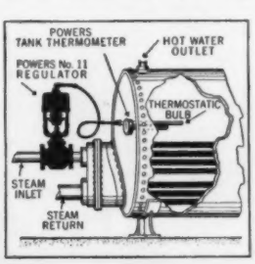

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THE NEW HIGH SCHOOL IN THE MAKING. *The Philosophy and Practice of a Modernized Secondary School. By William L. Wrinkle, Assisted by Members of the Staff of the Secondary School. New York: American Book Company,* 1938. *Pp.* ix+318. $2.50.

An easy to read presentation of the assumptions, implications and practices in modern secondary education.

THE PROGRESSIVE ELEMENTARY SCHOOL. *A Handbook for Principals, Teachers and Parents. By Robert Hill Lane, Gertrude M. Allison, Ethelyn Bishop and Dorothy Johns McNary. Boston: Houghton Mifflin Company,* 1938. *Pp.* ix+197+xi. $1.90.

Description of progressive practices in progressive elementary education in Los Angeles.

THE NATIONAL YOUTH ADMINISTRATION. *By Palmer O. Johnson and Oswald L. Harvey. Staff Study No.* 13. *Prepared for The Advisory Committee on Education. Washington, D. C.: United States Government Printing Office,* 1938. *Pp.* x+121. $0.15 *(Paper Cover.)*

Significant study and findings of an important area in the problem of equalizing educational opportunity. Highly recommended for professional reading.

Just Off the Press

SPEECH-MAKING. *By James A. Winans. With a Chapter on Voice and Speech by Charles K. Thomas. New York: D. Appleton-Century Company, Inc.,* 1938. *Pp.* x+488. $2.50.

GUIDANCE MANUAL FOR VERMONT SECONDARY SCHOOLS. *Montpelier: Issued by the State Board of Education,* 1938. *Pp.* 113. *(Paper Cover.)*

THE DAILY NEWSPAPER AND HIGHER EDUCATION. *A Report on Certain Findings and Inferences of the Stanford School Press Relations Investigation,* 1937-38. *By Rex F. Harlow. Stanford University, Calif.: Stanford University Press,* 1938. *Pp.* xviii+44. $1 *(Paper Cover).*

INTERCOLLEGIATE DEBATES. *Edited by Egbert Ray Nichols. Year Book of College Debating. Volume* XIX. *New York: Noble & Noble, Publishers, Inc.,* 1938. *Pp.* x+438. $2.50.

BRITISH-AMERICAN ALLIANCE. *Edited by E. C. Buehler. Annual Debater's Help Book. Volume* V. *New York: Noble & Noble, Publishers, Inc.,* 1938. *Pp.* viii+389. $2.

EVERYDAY LIFE. BOOK TWO. *By Ethel Maltby Gehres. Social Science Readers. Photographs by Ralph M. Bair. Philadelphia: The John C. Winston Company,* 1938. *Pp.* 170. $0.68.

OFFICIAL BASKETBALL GUIDE FOR WOMEN AND GIRLS. *Containing the Revised Rules,* 1938-39. *Edited by Wilhelmine Meissner. Published for the National Section on Women's Athletics of The American Association for Health, Physical Education and Recreation. New York: A. S. Barnes and Company,* 1938. *Pp.* 80. $0.25 *(Paper Cover).*

CHANGING COUNTRIES AND CHANGING PEOPLES. *An Introduction to World Geography With Historical Backgrounds. By Harold Rugg. Boston: Ginn and Company,* 1938. *Pp.* xvi+586. $1.88.

YOUR PLACE IN LIFE AND HOW TO FIND IT. *A Handbook of Opportunity for Youth. Edited by John B. McDonnell. Champaign, Illinois: The Trailblazers,* 1938. *Pp.* 128. $0.25 *(Paper Cover).*

A GUIDE FOR CURRICULUM PLANNING. *Glencoe Public Schools. Glencoe, Ill.: Board of Education, September* 1938. *Pp.* 175. *Lithoprinted. (Paper Cover.)*

ABSTRACTS OF STUDIES IN EDUCATION AT THE PENNSYLVANIA STATE COLLEGE, PART VIII, 1938. *Edited by Charles C. Peters. Pennsylvania State College Studies in Education, No.* 21. *State College, Pa.: School of Education, Pennsylvania State College,* 1938. *Pp.* 52. *Lithoprinted. (Paper Cover.)*

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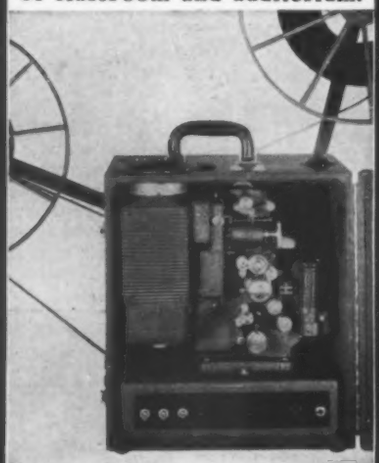

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Of THE NATION'S SCHOOLS, published monthly at Chicago, Illinois, for October 1, 1938.

State of Illinois } ss.
County of Cook }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared James G. Jarrett, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the The Nation's Schools, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

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Publisher: The Nation's Schools Publishing Co., Inc., Chicago, Illinois.
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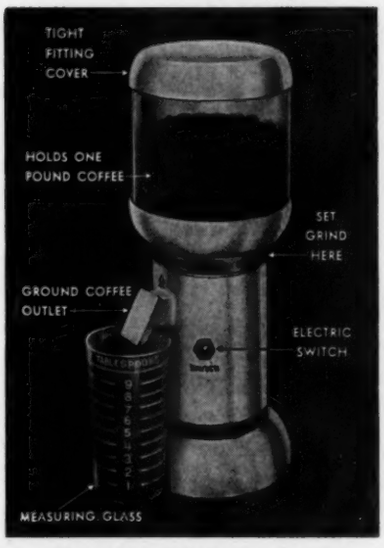

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THE OFFICE OF EDUCATION: WHAT IT IS. *Office of Education, Bulletin,* 1938, *Misc. No.* 2. *Washington, D. C.: United States Government Printing Office,* 1938. *Pp.* 80. $0.20 *(Paper Cover).*

THE VOCATIONAL ADJUSTMENT PROJECT. *By M. P. Nelson and Others. Sponsored by the Boys' Work Committee of the Chicago Rotary Club, Education Committee of the Chicago Association of Commerce in Cooperation With Chicago Board of Education. Chicago: The Chicago Rotary Club,* 1938. *Pp.* 47. *(Paper Cover.)*

PEN AND PENCIL DRAWINGS. *By Frances M. Beem. Peoria, Ill.: The Manual Arts Press,* 1938. 24 *Drawings in Paper Folder,* $2.

RED CLOUD OVER CHINA. *Edited by David Warren Ryder. Far Western Affairs Pamphlets, Vol.* 1, *No.* 6. *San Francisco: The Editor,* 447 *Sutter Street, August* 1938. *Pp.* 40. $0.10 *per copy,* $1 *for* 12 *issues (Paper Cover).*

CHINA, JAPAN AND THE OPEN DOOR. *Edited by David Warren Ryder. Far Eastern Affairs Pamphlets, Vol.* 1, *No.* 5. *San Francisco: The Editor,* 447 *Sutter Street, July* 1938. *Pp.* 31. $0.10 *per copy,* $1 *for* 12 *issues (Paper Cover).*

NOTES FOR BUYERS

On the Cuff at the Convention

More than seventy manufacturers and distributors of school equipment and supplies gathered at the convention of the National Association of Public School Business Officials the week of October 10 to display their wares to school officials. The exhibit, which was the largest since the association was formed, was so located that the schoolmen inevitably passed through it on their way to and from meetings, a situation that met with general approval.

A harmonious background to the exhibit was supplied by the music of an electric organ being demonstrated as an instrument that has ceased to be a luxury and is rapidly becoming as much of a necessity to the school as the piano. The organist reported that at one school the pupils were so fascinated by the instrument that they volunteered to go out and earn the money to buy it.

Across the aisle, the staccato clicking of a typewriter kept up a running accompaniment to the organ. There were typewriters in evidence in several places, which seems to indicate that future generations of school children will probably know how to type before they learn to write. One super-streamlined machine, indeed, was presented by the manufacturer as the "typewriter of the future."

Blackboard erasers for wiping out mistakes were displayed in several quarters. One of these is said to combine two operations in one: erase chalk marks and remove the film of chalk dust which always adheres to the blackboard surface. Of course, erasers must themselves be cleaned and an electrically operated machine, which works on the vacuum cleaner principle, was offered as one answer to the cleaning problem. The method of cleaning is by suction, the dirt and dust being loosened by a brush and automatically deposited in a dustproof bag.

Map and globe makers, we were informed, have their work cut out for them these days keeping up with historical and geographical changes. So

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far they are just one *anschluss* behind Herr Hitler and that situation is speedily being corrected. The maps and globes exhibited were beauties calculated to make history and geography rate as favorite subjects. One manufacturer was pleased to report that a large and handsome globe is now selling at just about a half of its former price.

A new idea in schoolroom planning is that of using space along the windows, between and adjoining the ventilating unit and the radiator, for built-in shelves and storage cabinets. To make the idea practicable, a manufacturer of ventilating units is offering them with special casings designed to combine with standard storage units so as to effect an appearance of coherent beauty. This manufacturer does not furnish the storage cabinets or shelving. These may be especially fabricated of wood or steel or may be obtained in standard steel units from any one of several organizations supplying locker and storage equipment.

Visual education occupied a good share of the limelight. One exhibitor entertained passers-by with a movie, complete with sound, of Civil War days. From the numbers of interested onlookers, one gathered that this method of teaching is gaining favor with school officials by leaps and bounds.

Generalities

Frank W. Heiskell, advertising manager of the International Harvester Company, has retired after forty-five years of service with that company and the McCormick Harvesting Machine Company. Mr. Heiskell was succeeded as advertising manager on October 1 by A. C. Seyfarth, assistant advertising manager.

Attention value plus a simple illustration that conveys to consumers the features of its building materials has been so well achieved by the Insulite Company, Minneapolis, manufacturers of modern building materials, that it has brought to the company the distinction of receiving the gold award in the transparent wraps group of the All America Package competition. The cellophane sample wrap solves the problem of showing a sample and demonstrating the manner in which the product is applied to a wall and its appearance when installed. A series of multicolor printed wraps, which utilize the boards themselves as background for outline drawings, demonstrate the manner of use and the appearance when they are used.

Business Officials

(*Continued from page* 64)

expressed the opinion that the technic of budget preparation is one that needs thorough and complete study by those in the finance field. More movement toward functionalization and simplicity of the budget is inevitable, he believes.

One day during N.A.P.S.B.O. week in Chicago was given over to visiting the Chicago schools. Special trips were arranged and transportation provided to give the visitors a comprehensive idea of the educational program. Then there was the annual dinner designated as "Chicago Night," which with other social events scattered in between the sessions left few idle moments.

Officers for the coming year are: President, H. C. Roberts, secretary and business manager, board of education, Sioux City, Iowa; vice president, John W. Lewis, assistant superintendent of schools, Baltimore; secretary, H. W. Cramblet, secretary, board of education, Pittsburgh (reelected); treasurer, Albert Austermuhl, Camden, N. J. (reelected). The retiring president, Russell W. Hibbert of St. Louis, now becomes a director. John T. Cate of Glendale, Calif., and H. S. Mitchell of Dearborn, Mich., are also directors.

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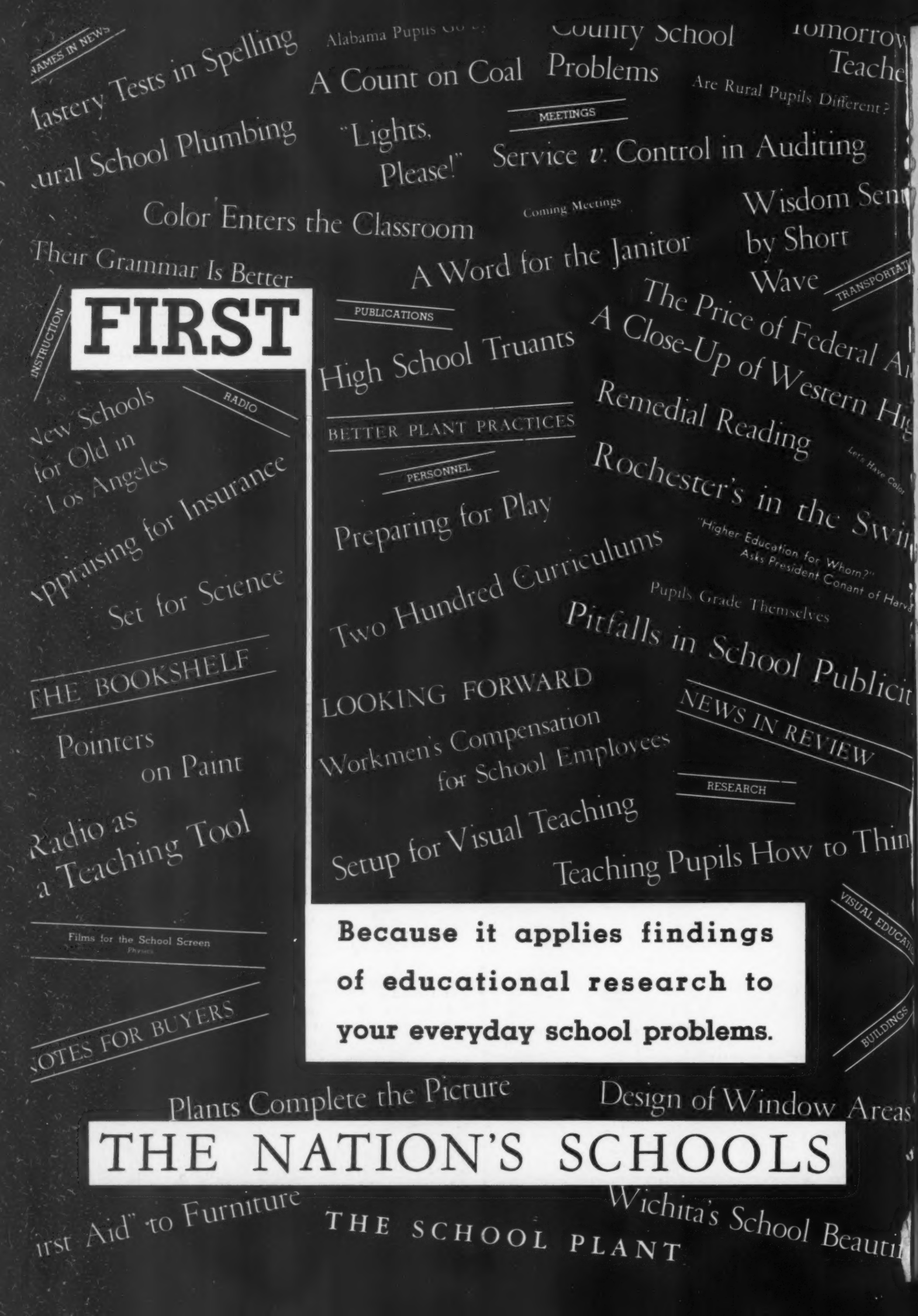
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A Close-Up of Western Hig
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Preparing for Play
"Higher Education for Whom?" Asks President Conant of Harva
Two Hundred Curriculums
Pupils Grade Themselves
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Side Glances—

BETTER Washrooms! Make a place in the school budget for better washrooms! This is the rally cry that will be sounded next month in The NATION'S SCHOOLS when a special section will be devoted to washroom planning and modernization. This section will be the introduction to a year or more's campaign for improved facilities for public school pupils.

Sanitarians and civic leaders would be shocked, fastidious mothers would faint, and superintendents and principals would want to slink out of sight if we could lead them, in shocked procession, through some of the tenement toilets that serve public school children.

But tenement toilets are not by any means the whole story. There are other school washrooms that appear well-kept and in reasonable repair, yet investigation will reveal the dangers of back-siphonage and other disease menaces.

Emphasis in the coming campaign for Better Washrooms, however, will be not on bad washrooms but on safe installations. It will tell how, by modernization of old plumbing and washroom equipment and by the addition of economical sanitary supplies, older school buildings can compare favorably with well-designed new buildings in meeting the health and sanitary needs of the pupils. Attention also will be given to washroom layout and equipment in new school structures.

ADMINISTRATORS think they favor theory but our circulation manager knows that calls for extra copies of a given issue are for plain everyday practical accounts of how some school head or teacher did a specific job. He will, therefore, be expecting to get requests over a period

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of months, and even years, for the January 1939 issue containing "The Story of Mathville," an account of a project developed by the 8A-1 class in mathematics at the Grosse Pointe (Mich.) High School under the direction of Humphrey C. Jackson.

THE nation's schools had only one William McAndrew. Ripening years and accumulated experience—part beautiful, part bitter—had turned Mr. McAndrew into that kindly philosopher who, for a number of years preceding his death, wrote the "Happy to Say" page so widely followed by readers of this magazine. The page passed with its author.

To serve the many subscribers who have missed the McAndrewisms, a quiet search for another informal columnist has been going on for some time. Next month we present James Frederick Moffitt of Hamburg, N. Y., in the rôle. Superintendent Moffitt is not at all another McAndrew but a distinct developing personality in his own right. Watch for his first column.

SANITY is all on the side of smaller school cafeteria units. The idea of making the school luncheon an educational procedure does not jibe well with the usual lunchroom setup. The din of dishes and the clamor of a thousand excited voices are not aids to digestion or relaxation or even common courtesy.

In line with the trend toward seating smaller groups, The NATION'S SCHOOLS will present, beginning in January, a series of five cafeteria layouts.

The layouts selected have seating capacities ranging from 275 to 800. They were chosen to show different types of counter arrangement, location of faculty dining room, important pieces of food equipment and convenience of entrances and exits.

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ADVERTISING PAGES REMOVED

LOOKING FORWARD

The Year Closes

THE year closes on an optimistic note so far as public schools are concerned. The secondary depression did not require as large a current expense sacrifice as many pessimists last spring believed that it might. Its effect was felt chiefly in submarginal districts and those urban centers carrying a heavy burden of debt.

The school plant field, which usually receives the first and heaviest shocks, was again affected in budgets passed early in the calendar year, especially in larger urban centers. However, extensive grants from the Public Works Administration for new buildings and greater focussing of attention upon plant upkeep and renovation by the Works Progress Administration have helped considerably in maintaining a certain degree of interbudgetary balance. An enlargement of N.Y.A. work-scholarships for needy youth in secondary schools and colleges has kept many thousands of pupils in school.

Public education cannot expect much general permanent improvement until urgent reconstruction problems are solved. The 127,000 independent school districts should be reduced as quickly as consistent with democratic procedure into not more than 30,000, thus eliminating the marginal and submarginal districts that can scarcely maintain themselves even during times of reasonable prosperity. Greater stability in finance can be attained through a better balance in fiscal sources for education and a sensible sharing of all educational expenses by local, state and federal governments. It is also entirely within the realm of possibility that a federal fiscal policy toward public education may be established in the next congress if the teaching profession can agree upon a rational program. The greatest and most essential improvement of all — increase in the efficiency of the instructional process — is dependent upon the improvement of teaching and administrative personnel. It is within reason that the operation of the schools may be improved and stabilized in a relatively short time. The improvement of instruction will require a much greater span and more consistent effort. Increased emphasis upon quality of personnel by our teacher training institutions makes this area much more promising. Careful weighing of all favorable and unfavorable elements indicates that there is valid reason for a sensible optimism with respect to the future of public education.

Why Excite Them?

THE 1938 football season has passed into history and many a school superintendent, high school principal or college president is breathing normally again. During the last three months reports from practically every section of the country have reported hard fighting, near-riots and property damage resulting from football sprees. These conflicts not only included college students but also were a part of secondary school extra-athletic life.

The community press has naturally not played down these mass conflicts. People whose property has been damaged have a reasonable cause for grievance even if some payment is grudgingly and tardily made, through institutional insistence. The policemen who use force to protect private and community property have not earned wide popularity. Neither have they become fonder of the students.

The major public resentment against these mob excursions finally falls against the school itself. Both collegiate institutions and secondary schools suffer a lowered public respect in most instances. A short half hour of "activity" by adolescent mobs may destroy a public institutional confidence that it has taken years to build.

Are these fall student riots to be accepted as a natural phenomenon of child growth or is it possible to curb their growing danger? Is youth at fault or does the responsibility rest with the institution?

Wherever football is king it is almost axiomatic that school spirit must be produced by creating a high emotion of loyalty around the institutional champions who comprise the team. Prior to week-end games large mass meetings are held for the purpose of creating mass emotion for the support of the team. It isn't a natural emotion. It must be artificially stimulated. All the exciting devices of rabble-rousing propaganda are employed and the adolescent is aroused to a high pitch. The stimulation of mass emotion naturally has its

disadvantages. Once aroused it is necessary to find some outlet for surging enthusiasm. The will to fight has been heavily stirred and seeks an antagonist. It is intensified by the welding together of the individuals as a group. A well-organized mass meeting produces an unusual mass emotion. The group has been brought to a climax. There must be some outlet. Since these meetings are usually held a day before the game, there is in too many instances an almost immediate reaction which may proceed against property or people that stand in the way of the desire to make an objective. At its lowest point, it merely disrupts the work of the secondary school for the balance of the day.

During and after the contest, it too frequently takes the form of physical mass action against the supporters of an opposing team or such conflict may grow out of the attempt to obtain worthy trophies or souvenirs, usually at the expense of the opponents' property. When conflict becomes strong, the police interfere and the sensational newspapers shriek the story in eight column headlines to staid and conservative taxpayers.

The net result of developing this type of "school spirit" is loss of prestige and community confidence, the stimulation of bad habits of thought and action, the inculcation of "mobocracy" as a substitute for democracy. Regardless of tradition, community acceptance and child insistence, it is poor educational technic.

In our estimation the schools themselves are largely responsible for the difficulties arising during the brief fall season of intense school and community competition growing out of football. This result is not the fault of football but only of some of its more emotional friends and supporters. Until the school takes some steps to develop a sincere and continuing spirit of interest and support of the school based on something better than artificially stimulated, supercharged emotion, it will continue to run these risks and to nullify the effects of much other good teaching. A healthy self-discipline operative under all conditions is a much better educational goal.

Group Efficiency

TO THOSE confirmed individualists in administration who believe so fervently and finally in the value of centralized and individual control as opposed to group planning, reading of two recent contributions is strongly recommended.

The rapid growth of the junior and senior high school movement in Los Angeles resulted in a definite need for clarification of administrative activity and more effective administration organization. A series of committees, representing the several areas involved, spent a year in study of the problem. Recently they published their results in a meritorious monograph entitled "The Functions of Secondary School Administrative Staff Members." The recommendations are developed in terms of the Los Angeles system but should be of interest in other places as well.

Another argument is that business cannot be efficient unless it is completely "centralized and autocratic" in its administrative organization. This great myth about business efficiency sadly needs deflation. In addition, there is little sense in attempting by analogic reasoning to direct educational organization into channels parallel to business. However, even in this area, there has been published recently a story of unusual improvement in efficiency through group effort. A certain business during 1932 decided to try more democratic methods of planning in order to ride out the depression and to improve its efficiency. The results of this experiment, published as "Multiple Management" by Charles McCormick (Harper's), is disconcerting to those whose management beliefs are finally fixed. The success of the plan surprised even the management and is being studied extensively by other business ventures. The reading of both publications is urged upon administrators regardless of their philosophies.

Earmarking Funds

DISSATISFACTION with forms of state school support that lack constancy and tend toward instability in school programs has led a number of educators to favor the idea of specifically earmarked sources of revenue and even constitutional mandate for the allocation of certain forms of revenue. Since this attitude toward earmarking may gain widespread support among the teaching profession, it may be desirable to examine its assumptions and to attempt to draw some general conclusions.

No one will question the necessity for a stable and relatively certain financial support not only from state but also from local sources. Public education is a long-time activity, extending over a considerable period in the life of an individual, and it requires a degree of certainty to make possible the planning and execution of instructional programs. From one standpoint it may be stated that when a child enters the preprimary division of the public school, the state actually enters into a contract to furnish to that child the educational opportunities that are necessary to prepare him for living capably in his culture. The depression period has been characterized by unusual instability in educational income and the nervous attitude of educators may be easily appreciated.

The question naturally arises whether this fiscal instability can be eliminated through the process of earmarking or constitutional mandate.

From the standpoint of sound fiscal theory in democratic government, social needs must be considered as a totality at any time. While the need for social services may be relatively constant, the type and extent of those services change. The argument that educational serv-

ices are constant is a dubious one. Despite the trend toward a stabilized population, both the extent and the quality of the public educational program in the United States must undergo profound changes within the next decade or two. It is impossible at this time to state that the limits of educational need can be determined in advance for any significant number of years.

It also is sound democratic procedure that the people be permitted from time to time to register their attitude toward social activities supported through taxation and to determine where the emphasis shall be placed in terms of real value to them. This right for social review means that the proceeds of taxation must be considered as the total social budget in which education normally takes its rightful place and logical share. Any attempts to hamper this right of review will tend to defeat its purpose in the long run.

The earmarking of specific revenues is dangerous also insofar as it will not produce the desired results. All revenue is conditioned by social economic productivity. In bad times there will naturally be available for social purposes, unless the people are willing to make unusual sacrifice, a smaller total revenue. The earmarking of a specific tax will not ensure stability. It merely ensures the proceeds from that particular tax under current conditions. The amount will still vary.

On the whole, the practice of earmarking is a dubious procedure. The solution to the problem lies rather in the more successful interpretation of institutional needs to the people so that the realization of value will be greater and more vital to them. The best means of obtaining a relatively stable budget for public education is in the creation of a dynamic public opinion as to value and need plus fundamental improvement both in structural organization and in internal financial methods.

Method Is Transient

THE latest practices of progressivism in elementary education are expressing themselves through a methodology most commonly called the "activity plan" or "activity school." An increasing number of elementary school buildings have been designed during the last year especially to meet the needs of this method and the changed administrative practice demanded by it. Pushed on by the high emotional enthusiasm of the progressivists, educational designers and architects have made unusual attempts to design school plants for these special needs. This is sound functional practice.

In meeting these current needs too many of the plans are producing an internal inflexibility that departs from normal functional design and represents a tendency that may have expensive terminal results. The provision of special activity rooms between classrooms or studios and the development of small specialized facilities are certainly reasonable but their incorporation into the total design so that they produce an inflexible building interior cannot be defended. It is decidedly poor practice.

One lesson that educational designers have learned during the last twenty years is that while education as an activity is constant, methodology is highly transient. During our own brief professional life three methodologies have come and gone and have made room for a fourth. The activity method as now conceived, particularly in its more extreme manifestations, will probably have no greater finality than any of its predecessors. It is, therefore, most desirable to take this probability into consideration when designing school plants. Safety, internal flexibility and external expansibility are still the only three constants in school plant design.

Educational designing at any period should start with and maintain these elements in serving whatever temporary methodology is dominant at the moment. There is no greater validity in producing an inflexible building for the activity method of today than there was for any of the methods of yesterday, regardless of the enthusiasm for new current practices.

The classroom teacher can contribute much to the improvement of new school plants but the nature of his specialization usually has a limiting effect on total vision. Emotions should not be permitted to subordinate the lessons learned from past mistakes. Modern school buildings are designed for at least fifty years. Possibly three different methodologies will successively dominate practice during the building life. Each building must be designed to satisfy its function but not at the expense of the future. More progressive educational designing to provide for greater rather than less internal plan-flexibility is needed.

World Federation

THE 1939 meeting of the World Federation of Education Associations is planned for Rio de Janeiro from August 6 to 11. President Paul Monroe hopes to make this first international educational gathering on the South American continent contribute also to the development of closer "good neighbor" relationships with the Latin-American republics. Plans are under way to provide easy and inexpensive transportation for educators who desire to make this trip. There will be a chance not only to attend the convention but, if a sufficient number of people are interested, to visit other important South American countries. Since arrangements of this nature require careful planning long in advance of the time, President Monroe will welcome early decisions from those who may consider attending.

The Editor

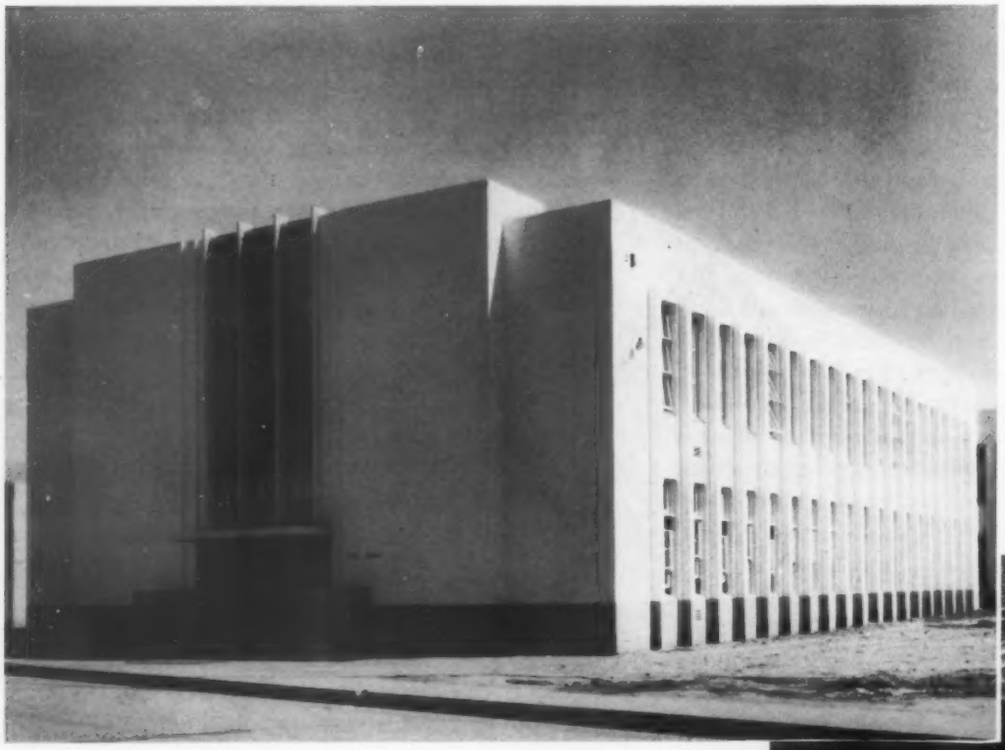
P.W.A. and the Public Schools

ALICE BARROWS

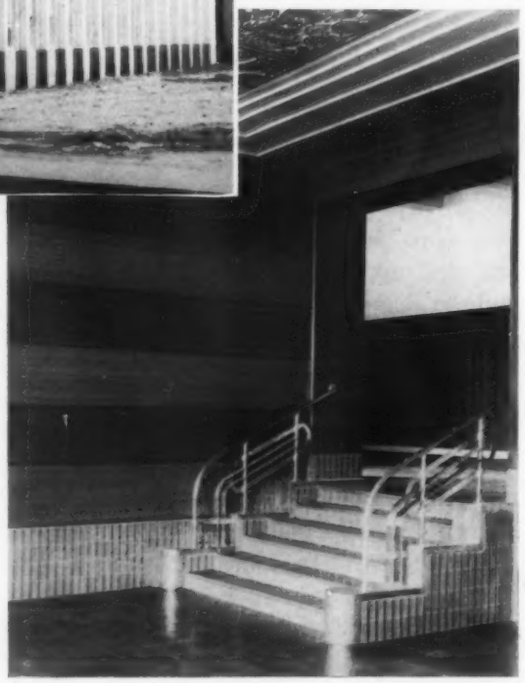
THE P.W.A. has been a lifesaver for the public schools of this country. From September 1933 to Oct. 12, 1938, grants and loans by the P.W.A. have made possible the erection of 6375 school buildings at an estimated cost of $929,620,245. Of this amount, the P.W.A. grants and loans totaled $452,623,062. Of this total allotment $171,808,801 has been allocated since March 31, 1938, from the congressional appropriation for P.W.A. which was made last spring.

The vital importance of these grants and loans for public school buildings by the P.W.A. becomes evident when we realize that the capital outlay for schools dropped from $370,877,969 in 1930 to $59,276,447 in 1934. As it takes two years to erect a school building, the latter figure represented the buildings erected with appropriations made in 1932. The situation was serious not merely because many schools were overcrowded but because two out of every five school buildings in the country were more than 30 years old. This means that 39 per cent of all the buildings in the country were obsolescent from the standpoint not only of construction but of the educational facilities they provided for the pupils.

Because of the rapid changes in social and industrial conditions during the last ten years, this lack of modern educational facilities in public school buildings is nothing short of a tragic handicap to the youth of the country. Children in elementary schools as well as high schools need much more than the all classroom school building of 30 years ago. If they are to meet the conditions of modern times and deal with them adequately, they must be provided with the building facilities needed for a modern educational curriculum, science laboratories, libraries, art rooms, music rooms, commercial

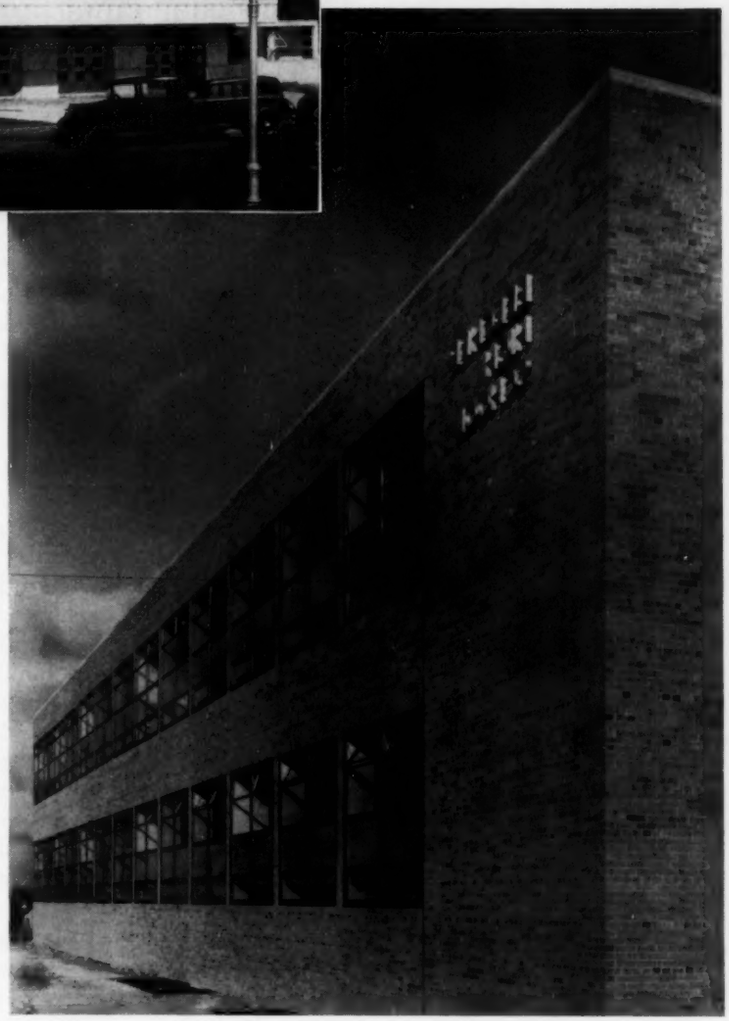


Also in Long Beach is this striking entrance which greets pupils in Washington Junior High School, another P.W.A. project. The strong horizontal feeling of modern interiors is apparent, with only the curving accents of the stair rail to make a contrasting note.



Streamlined and gay with color, this P.W.A. structure houses the fine arts department of Alexander Hamilton Junior High School, Long Beach. The exterior is of yellow concrete with blue trim and chromium metalwork. It is earthquakeproof, like all newer buildings in California.

Below: The school of today pictured here is Beecher High School, Flint, Mich. Twelve small two room buildings and a 96-year-old frame structure have been replaced by this well-lighted, well-designed school. How glass may be used architecturally for decorative as well as utilitarian purposes is shown in the window treatment. The building won mention in a national contest conducted by a glass association.



Left: Glimpse of the home economics laboratory in the new Reading Junior High School in Reading, Pa., constructed and equipped through a P.W.A. allotment. Right: Community as well as school is served by this auditorium and gymnasium in Arkansas City, Kan., erected with P.W.A. aid to afford a community center.

rooms, gymnasiums and auditoriums.

Furthermore, the modern school building must provide facilities not only for elementary and high school children but for out-of-school youth and adults. Such facilities are not available in the average 30 year old public school building.

Not only are two-fifths of the buildings in the country more than 30 years old, but there are still 132,000 one room schools in the United States. A one room school is about as appropriate for the educational needs of a child in 1938 as would be the one horse shay for the business man of 1938. Yet when the need for modern school buildings is emphasized, someone is liable to come forward with the statement: "After all, buildings are not important; it is the teacher that is important. Remember Mark Hopkins and the two ends of the log."

The teacher is important, but in these modern times he needs more than a log. No one teacher can teach all the subjects that are essential in the modern school curriculum. If children are to be adequately prepared for the complex conditions of modern life they need teachers of science, art, music and drama. The science teacher needs a well-equipped laboratory; the art teacher, the tools of her profession; the music teacher needs a room for choral singing and for instrumental work, and both the music and art teachers need an auditorium in which to present finished performances to school or public.

To what extent has the P.W.A. assisted not only in supplying funds for school buildings but in making possible the construction of modern school buildings?

The figures in tables 2 and 3 on the next pages supply interesting answers to this question. The data contained in these tables refer to the construction of buildings from September 1933 to Dec. 1, 1936. As will

Table 1—Allotments of P.W.A. for Nonfederal Educational Building Construction, September 1933 to October 12, 1938

Type of Project	No. of Projects	Total Est. Cost	Funds Supplied by Applicant	P.W.A. Allotment		
				Total	Loan	Grant
1	2	3	4	5	6	7
A. Allotments from September, 1933, to March 31, 1938						
Educational Buildings	4,445	$ 677,316,543	$ 328,959,751	$ 348,356,792	$ 83,855,428	$ 264,501,364
Secondary schools	4,001	561,886,969	281,072,708	280,814,261	58,852,599	221,961,662
Colleges and universities	352	97,950,959	37,523,290	60,427,669	24,660,029	35,767,640
Other educational institutions	37	11,044,255	6,550,806	4,493,449	161,000	4,332,449
Public libraries	55	6,434,360	3,812,947	2,621,413	181,800	2,439,613
*B. Allotments from March 31, 1938, to Oct. 12, 1938**						
Educational Buildings	2,711	471,897,930	247,678,056	224,219,874	11,838,200	212,381,674
Secondary schools	2,374	367,733,276	195,924,475	171,808,801	6,296,200	165,512,601
Colleges and universities	267	92,843,999	45,630,213	47,213,786	5,439,000	41,774,786
Other educational institutions	27	5,778,151	3,177,986	2,600,165	———	2,600,165
Public libraries	43	5,542,504	2,945,382	2,597,122	103,000	2,494,122
C. Total Allotments, September, 1933, to Oct. 12, 1938						
Educational Buildings	7,156	1,149,214,473	576,637,807	572,576,666	95,693,628	476,883,038
Secondary schools	6,375	929,620,245	476,997,183	452,623,062	65,148,799	387,474,263
Colleges and universities	619	190,794,958	83,153,503	107,641,455	30,099,029	77,542,426
Other educational institutions	64	16,822,406	9,728,792	7,093,614	161,000	6,932,614
Public libraries	98	11,976,864	6,758,329	5,218,535	284,800	4,933,735

*These allotments were made from the appropriation for the P.W.A. passed by Congress in March 1938.

be seen from table 2, only 6.7 per cent of all the elementary and high school buildings erected with P.W.A. funds were one room schools, and only 23 states had erected one room buildings. In half these states the number of one room buildings varied from 2.2 per cent to 6.3 per cent of the total buildings erected.

There are, of course, certain conditions under which one room schools are needed. For example, there may be "geographical pockets" which make it necessary to furnish a one room school for an isolated area, or it may be necessary to furnish some one room schools for primary children in order that they may not have to be transported too far to school.

Not only were there only 108 one room elementary and high school buildings, but there were only 244 two to three room school buildings erected with P.W.A. aid. Furthermore, more than half of the buildings erected with P.W.A. funds from September 1933 to Dec. 1, 1936, had more than six rooms. For example, there were 750 buildings with 7 to 15 rooms; 112 buildings with 16 to 24 rooms; 38 buildings with 25 to 35 rooms, and 47 buildings with 36 rooms or more. In other words, there has evidently been an encouraging tendency on the part of school officials, who asked for P.W.A. aid, to erect buildings sufficiently large to make possible enriched educational facilities. That such facilities are being provided in these new buildings was shown in a recent study of the U. S. Office of Education, which consisted of an analysis of 371 buildings erected with P.W.A. aid. It was found that 293 of these buildings contained auditoriums, 284 had gymnasiums and 227, libraries.

In spite of the invaluable aid that has been given by the P.W.A. for school building construction, superintendents of schools in 62.3 per cent of cities of 10,000 population and more estimated in January 1937 that an additional $496,000,000 was needed for school building. Since that time an additional $171,808,801 has been allocated from P.W.A. funds for school buildings.

The amount needed for rural school buildings is not known because comprehensive surveys of school building needs have been made by few states because of lack of funds for such surveys. For this reason the National Advisory Coun-

Table 3—Summary: Number and Per Cent of Buildings Erected with P.W.A. Aid of Various Sized Rooms, by Types of Schools, from September 1933 to December 1936

Type of School	Total Bldgs.	% of Total	Number and Per Cent of Total Buildings Having: 1 Rm.		2-3 Rms.		4-6 Rms.		1-6 Rms.		7-15 Rms.		16-24 Rms.		25-35 Rms.		Over 36 Rms.	
			No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Elementary	937	49.8	76	8.1	165	17.6	294	31.4	535	57.1	345	36.8	34	3.6	8	.8	15	1.6
High Schools	664	35.3	32	4.8	79	11.9	178	26.8	289	43.5	276	41.6	47	7.1	24	3.6	28	4.2
Combined Elementary and High Schools	262	13.9	3	1.1	35	13.4	70	26.7	108	41.2	121	46.2	23	8.8	6	2.3	4	1.5
Elementary and Junior High Schools	7	.4	–	–	–	–	1	14.3	1	14.3	3	42.9	3	42.9	–	–	–	–
Junior High Schools	12	.6	–	–	–	–	2	16.7	2	16.7	5	41.7	5	41.7	–	–	–	–
Totals	1882	100.0	111	5.9	279	14.8	545	29.0	935	49.7	750	39.9	112	6.0	38	2.0	47	2.5

cil on School Building Problems and the National Council on Schoolhouse Construction have both passed resolutions pointing out the need of funds for state-wide school building surveys in order to determine school building needs and thereby ensure the erection of buildings where they are needed, the reorganization of school districts into larger administrative units and the construction of larger school buildings with modern educational facilities. Such a nation-wide organization of state-wide building surveys, carefully planned so that their results may be comparable, is the next step in the development of an efficient and forward looking school building program.

Table 2—Per Cent of Total School Buildings Erected with P.W.A. Aid, September 1933 to December 1, 1936, Which Were One Room Schools, by States*

State	*Of Buildings Erected With P.W.A. Aid*		
	1 Rm. Schools, %	*Total Bldgs.*	*1 Rm. Schools, No.*
1	*2*	*3*	*4*
United States.	6.7	1,601	108
N. D.	50.0	30	15
Fla.	40.7	27	11
S. D.	38.1	21	8
Iowa.	31.8	44	14
Neb.	22.2	27	6
Ariz.	21.1	19	4
Minn.	16.0	25	4
Ala.	15.7	51	8
Colo.	14.3	28	4
N. H.	9.1	11	1
Kan.	7.7	39	3
Ark.	6.3	16	1
Calif.	6.3	206	13
Tenn.	5.9	17	1
Va.	5.9	34	2
Mo.	4.8	42	2
Conn.	4.8	42	2
Ga.	3.0	66	2
Mass.	3.0	33	1
Okla.	2.7	37	1
Tex.	2.7	110	3
Ore.	2.6	38	1
Miss.	2.2	45	1

The following states had not reported by Dec. 1, 1936, any one room schools erected with P.W.A. aid: Del., D. C., Ida., Ill., Ind., Ky., La., Me., Md., Mich., Mont., Nev., N. J., N. M., N. Y., N. C., Ohio, Pa., R. I., S. C., Utah, Vt., Wash., W. Va. Wis. and Wyo.

*Exclusive of combined elementary and high schools, elementary and junior high schools, and junior high schools. The data for these school buildings are given in the summary table.

To Develop a Richer Vocabulary

R. E. C. McDOUGALL

IT IS widely recognized that a rich practical vocabulary is an essential means of providing for the exchange of ideas and the acquiring of worthy experiences. Reading has been the subject that has been saddled with this responsibility. Reading has been considered an activity that, once acquired, is the key to all subsequent knowledge and experiences.

But experience has shown that reading in itself is not sufficient; the development of a practical vocabulary is necessary in almost every field or subject into which the child may venture. The efficiency of the school product, its pupils, is judged largely by the pupils' reaction to vocabulary meaning. It is significant that most intelligence and achievement tests are in a large measure dependent upon a developed vocabulary on the part of the pupils being tested.

It is not too much to say that we have been busy with the teaching of reading as an end in itself rather than with the development of vocabularies of the many fields into which we conduct the school child. This building of wider vocabularies naturally requires the use of a variety of materials and supplemental reading matter, in the future as in the past. However, one other essential that we need to fix firmly in mind is the need of teachers with a desire to motivate and encourage the pupil in the use of the material. Too often the material is thought to possess the all important factor of supplying the motivating energy.

Frequently we hear the complaint from a teacher in the next highest grade: "These children have not been taught to read." This usually is untrue, as the children have been taught to read but they are not familiar with the new material and with the new words being introduced in the vocabulary. These complaints come regularly in the upper grades where children are beginning to study the sciences and social sciences. It is not so much that the pupils cannot read as that they need specific guidance and instruction in the new subject material.

"Learn to read by reading" is a wise suggestion. This plan of enlarging the vocabulary is simply that of allowing the pupil to infer the meaning of words from the context. With some children this automatic way of reading secures certain results but with some others it happens that they "look over" a multitude of words and do a lot of guessing. This method, when combined with suitable guidance and with specific help, will produce welcome results as experiments have indicated, such as an increased vocabulary, greater accuracy in pronunciation, sustained interest in subject matter and a more precise comprehension of the material.

Any good teacher of reading will recognize these widely used methods. The reason for giving them here is to provide teachers of all grades and subjects with tested methods of vocabulary development.

1. If pupils have not been taught the names of letters in the primary grades, by all means provide for this lack at once. Spelling of words, enunciation and pronunciation depend upon this simple matter.

2. Provide the primary grades with a Black-or-White-Board Dictionary, in which the words and their objects are illustrated in colored chalk.

3. Provide a background of experience through activities, visual education, picture study, observation, illustration and explanation before or during the introduction of new material or vocabulary matter.

4. Let the teacher pronounce new words and illustrate their use in sentences or class discussion.

5. Employ activities that promote vocabulary growth, such as the search for new words, study of synonyms, antonyms, prefixes, spelling, matching words with pictures and the completion of sentences.

6. Refer to the dictionary on the board or to a desk copy or other sources of information.

How Does *Your*

By WALTER

THE November issue contained a description of the general plan of the Cooperative Study of Secondary School Standards and a statement of the way in which the 50 best and the 50 poorest schools of the 200 studied were used to validate the tentative evaluative criteria devised by the study.

The 50 best and 50 poorest schools were determined by their relative standing on a composite score based upon evaluative criteria, committee judgment, standardized tests, college success of graduates, noncollege success of former pupils, parent judgment and pupil judgment.

One of the most important fields to be considered in any secondary school is that of the curriculum and the courses of study. After careful consideration the executive and general committees in charge of the Cooperative Study formulated and approved the following "Statement of Guiding Principles" as fundamental to any effort at evaluation:

The curriculum may be defined as all the experiences that pupils have while under the direction of the school; it includes both classroom and extraclassroom activities, work as well as play. All such activities should promote the needs and welfare of the individual and of society.

Courses of study may be defined as that part of the curriculum which is organized for classroom use. They suggest content, procedures, aids and materials for the use and guidance of teachers, pupils and administrators. Thus considered they contain only part of the individual pupil's curriculum. The curriculum and courses of study should be chiefly concerned with the orientation, guidance, instruction and participation of youth in those significant areas of living for which education should supplement the work of other social institutions.

The results of the learning process should include: (1) factual information or knowledge; (2) meaning and understanding; (3) abilities to do—knowledge and understanding combined with skill; (4) desirable attitudes—scientific, social and moral; (5) worthy ideals, purposes, appreciations and interests, and (6) resultant intelligent participation in general life activities.

Because change is universal, constant adaptation and development of the curriculum are necessary. This should be a cooperative enterprise engaging all staff members, carried on under competent leadership and using all available resources. Carefully conducted and supervised experimentation for curriculum development is particularly valuable. Pupils should be prepared not only to understand the culture of the past; they should be prepared also for participation and leadership in present and future situations and activities. A total of 170 check list items and

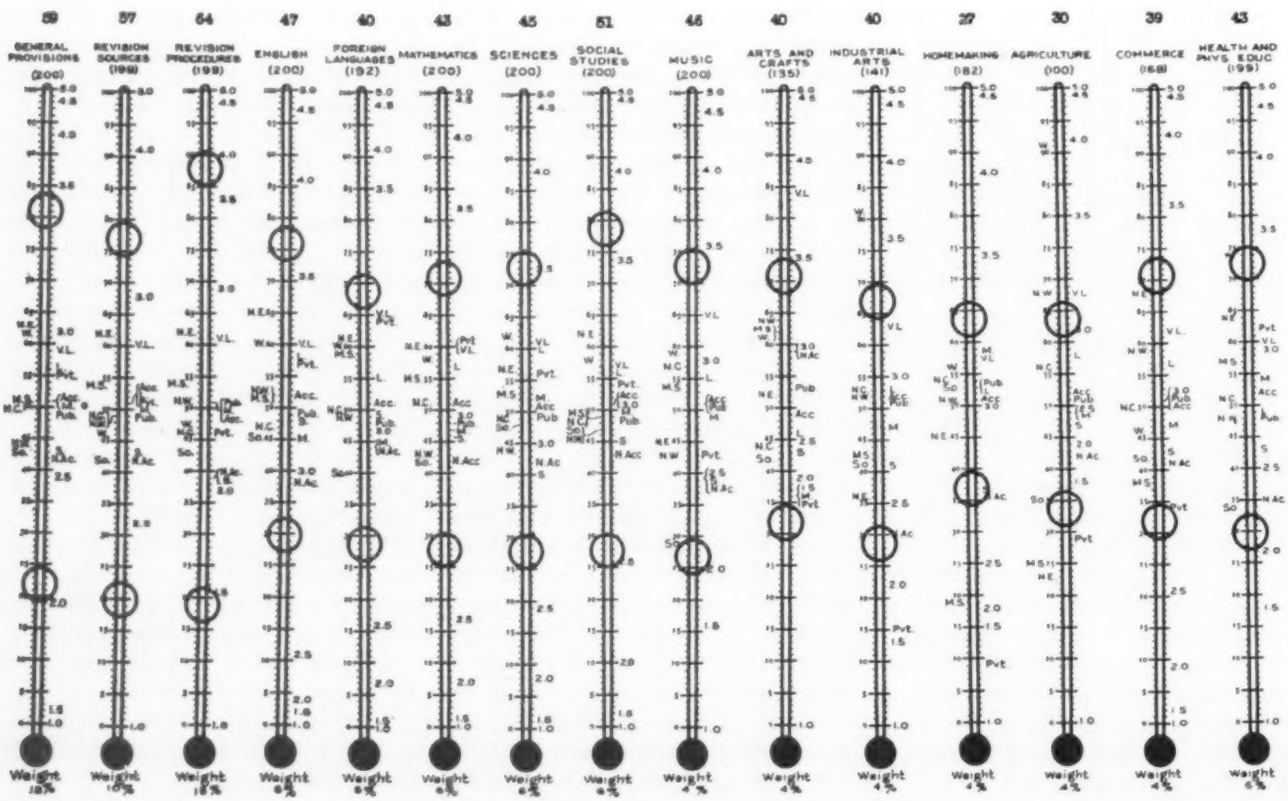


Fig. 1—Average educational temperatures for the 50 best and 50 poorest schools evaluated.

High School Rate?

CROSBY EELLS

29 evaluations based upon them was worked out in the curriculum field as concrete exemplifications of this statement of guiding principles. On the basis of these items the curriculum and courses of study of each of the 200 cooperating schools were studied and evaluated.

Figure 1 summarizes the evaluations on each of 15 major aspects (three general in nature and one for each of 12 principal subject matter fields) of the curriculum for the 50 best schools and for the 50 poorest schools of those studied. The center of the upper circle on each thermometer shows the average score of the 50 best schools, the center of the lower circle, the average score of the 50 poorest schools.

In interpreting this figure it should be noted that the maximum possible spread between the centers of the two circles is 75 points. The actual spread is shown by the figure at the top of each thermometer. These figures may be taken as measures of the discriminatory power of the different measures. Thus the "Revision Procedures" with a difference of 64 points (of the possible 75) is the best single measure of differentiation of the 15 shown between a good school and a poor one. This score is made up from the visiting committee's answers (on a five point scale) to the two following questions: "How well is the staff organized for study and development of the curriculum and courses of study? How well are such procedures as those suggested in the nine specifications of the check list under this heading followed?"

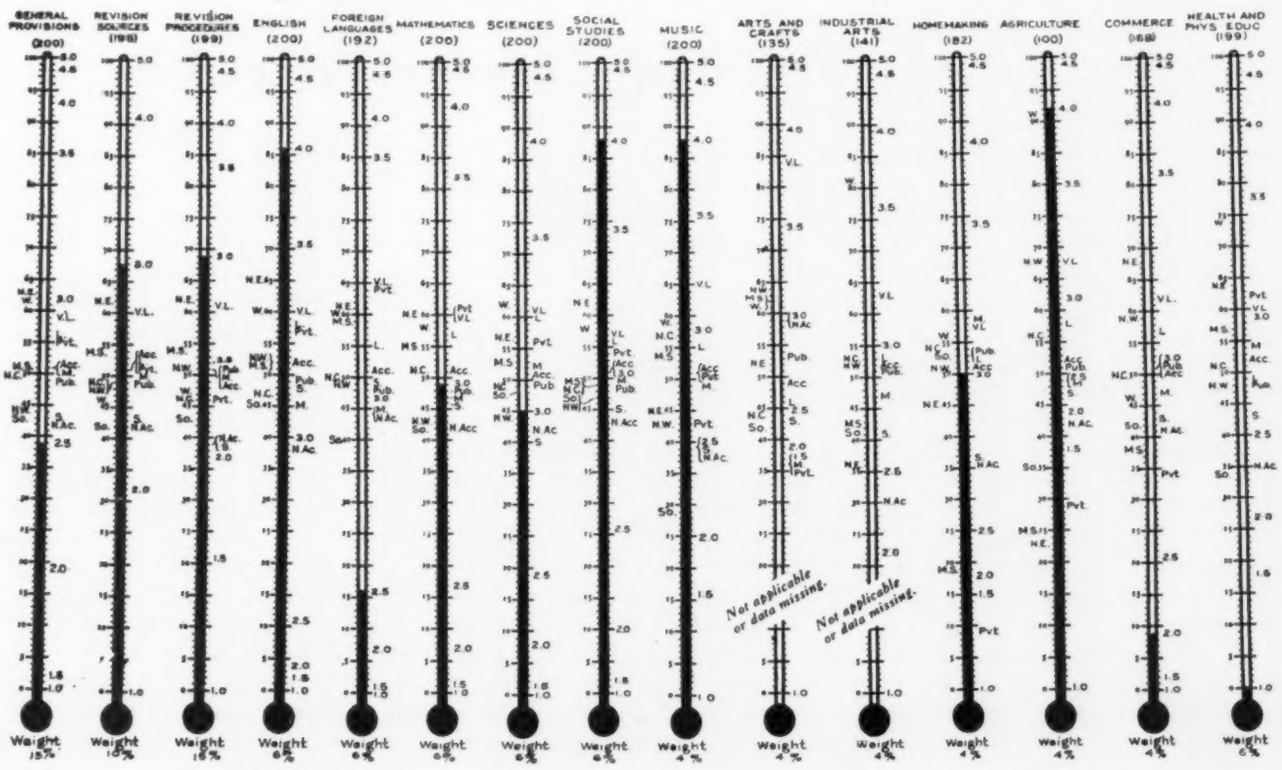
Among the subject matter fields the social studies are the best discriminative measure with 51 points (of the possible 75), with English (47) and music (46) almost as good. The best way, therefore, to obtain a quick approximation of the general quality of all the subject matter fields in a secondary school is to examine critically the curriculums and course offerings in social studies, English and music. If these are good, the whole school is likely to be superior. If they are poor, the school is likely to be inferior.

The least discriminatory measure is the field of homemaking with only 27 (of the possible 75) points, with agriculture not much better. Thus the evidence indicates that good schools and poor schools are not likely to show highly significant differences in the quality of work in homemaking or in agriculture.

The discussion up to this point has been in terms of the percentile scale on the left sides of the thermometers. Attention should also be directed to the rating scales on the right sides of the same thermometers. They are graduated from 1.0 to 5.0 and represent the judgments of visiting committees on the various features evaluated expressed as follows: 5.0, highly satisfactory or practically perfect; 4.0, very good; 3.0, average; 2.0, poor; 1.0, very poor.

In terms of this scale the third thermometer, "Revision Procedures,"

Fig. 2 — Temperatures in the curriculum field for the median school.



shows that the average rating for the 50 best schools was almost 4.0, "very good," while in the 50 poorest schools it was about half way between 2.0, "poor," and 1.0, "very poor."

In the five academic subject matter fields (English, foreign languages, mathematics, sciences and social studies) the average evaluation from the 25 per cent of poorest schools was higher than 2.5, while in five of the seven nonacademic fields it was lower than 2.5 and in one, agriculture, it was lower than 1.5. On the other hand in the group of superior schools (upper 25 per cent) the average rating was between 3.0 and 3.5 in all except three fields, English, sciences and social studies. In English and social studies the average was 3.7.

The features to be studied in connection with each subject matter field have been revised somewhat as a result of experience in applying them last year. The 1938 edition of the "Evaluative Criteria" states the check list items as follows:

In each major field or area provision is made for:

1. Emphasizing significant contribution of racial culture to present day life values.
2. Promoting pupils' understanding of present day society.
3. Stimulating pupils' interests and satisfying their needs.
4. Promoting the spirit and understanding of democracy.
5. Promoting desirable social relationships because of habits, understandings, appreciations and attitudes developed.
6. Selecting material having potential value in adult life.
7. Engaging in a wide range of experience for extending pupils' interests.
8. Making adaptation to the tastes, interests and abilities of individual pupils.
9. Stimulating continuous growth and improvement of pupils throughout school life.
10. Finding reference and illustrative materials and other aids.
11. Helping pupils to find reference materials.
12. Stimulating continuous development of independence and power.

Four evaluations are to be made of each subject matter field, based upon these check list items, stated as follows:

1. How adequately does the amount of the offering in each field meet pupil needs?
2. How fully do pupil needs justify the amount of offerings provided?
3. How adequate is the nature of the offerings in such respects as the 12 check list items given above?
4. How effectively do teachers use the means placed at their disposal?

Figure 1 is a highly concentrated graph of averages of many schools, showing as it does average scores for the 50 best and 50 poorest schools of the 200 studied. Figure 2 is specialized and individual. It shows the educational temperatures in the field of the curriculum and courses of study for a single school, the median school when the 200 studied were arranged in order of merit on the composite of all the measures mentioned in the first paragraph.

Although this is a typical or average school, its educational temperatures in the curriculum field show most striking variations from "very hot" to almost "frigid." It is a small public school in an agricultural section. Its work in agriculture is distinctly superior, better than that found in 92 per cent of the schools studied. It is better than the 85 percentile point in English, social studies and music, the three highly significant fields mentioned in discussing figure 1. It is about average in mathematics, science and homemaking. Its work in the commercial field is very poor and in health and physical education, nonexistent, although the committee felt this field should certainly not be neglected. It offers no courses, either, in arts and crafts or in industrial arts, but in these fields the committee judged that such courses were not needed in view of the conditions surrounding the school and the nature of the pupils attending it. Evidently, there is considerable food for thought in the study of this set of educational thermometers on the part of those responsible for the curriculum of the median school.

Each school using the methods of the Cooperative Study can obtain a similar vivid portrayal of its standing in a large number of significant features of the curriculum for the thoughtful contemplation of school board members, principals and teachers. A clear picture of where it stands is an excellent first step toward progress. Certainly it is hardly conceivable that even the average school can be content with the showing it makes on figure 2.

Handling Sample Textbooks

NEW textbooks are placed before the teachers for examination, without making an excessive demand on the publishers for free sample textbooks, under a new policy that went into effect this year at the La Salle-Peru Township High School and Junior College, La Salle, Ill.

All requests for sample textbooks by teachers in the high school and junior college go to the publishers over the signature of the superintendent. When the sample textbooks are received, they are stamped as property of the school and placed on a sample textbook shelf in the teachers' library where they may be examined or taken out by the teachers.

The request to the publisher includes the name and position of the teacher making the request, so that the publisher may send briefs, outlines and other explanatory material directly to the teacher.

Bookmen interested in getting sample textbooks before the teachers are likewise requested to send samples to the superintendent's office, where they are stamped as property of the school and placed on the sample textbook shelf in the teachers' library.

Teachers are encouraged to schedule conferences with bookmen during free periods when they call at the school so that they may keep in touch with what is being published in their fields. Since the bookman is the trained field man for the publisher and in most cases has a background of practical school experience, he usually has something to contribute.

Toward Academic Democracy

KALMAN A. SEIGEL

THE American college early felt the influence of business methods and has developed into one of the most autocratic of American educational institutions. Trustees and overseers, preoccupied with their own interests, delegated to the college presidents the duties normally assigned to the manager of a modern, efficient business organization and measured their success or failure with the commercial barometer of dollars and cents, the rate of expansion and the size of the endowments they could attract.

On June 20 the board of higher education of the City of New York adopted two by-laws which are regarded as progressive steps in American higher education, for they give to the faculty security in office—something professions have rarely enjoyed—and democratic control of the college. The new measures are being hailed as the Magna Charta of the college teacher. They will affect more than 1300 teachers and, indirectly, 75,000 students in the various divisions of the City College and Hunter, Brooklyn and Queens colleges, which comprise the College of the City of New York, administered by the board of higher education.

The new by-laws on tenure and faculty reorganization, which became effective in September and October, guarantee security in teaching positions during good behavior and efficient and competent service, bring about wider participation of members of the instructional staffs in the responsibilities of the faculty, provide for self-government of departments and set up machinery for the selection of personnel.

For the most part, teachers in the city colleges have enjoyed the rights of tenure for many years, particularly in the instructorial and professional ranks. The new by-law guarantees and makes specific a security they have had principally by practice. It confers tenure on all members of the "permanent instructional staffs of the colleges, high schools, model schools and other schools under the jurisdiction of the board of higher education." Included in that category are all persons having the rank of professor, associate professor, assistant professor, instructor, tutor, librarian, associate librarian, assistant librarian, assistant teacher, instructor, critic teacher or teacher, who have completed at least four full years of continuous service or have served three full years and have been reappointed for a fourth.

During the open hearings that preceded the adoption of the by-law, a bone of contention was the question of tenure for presidents and other administrative officers. Tenure is assured them only in the highest professorial rank they held before their appointment to an executive post as a president, dean, director, department head, principal or supervisor. Some critics see in this measure the means for removing several high administrative officials who have been in the center of conflicts waged in the city colleges with increasing frequency during the last fifteen years.

Two new by-laws adopted by the board of higher education of the City of New York are regarded as progressive steps in academic circles because they give the faculty security and a voice in administration

The tenure granted by the by-law is limited to the instructional staff. "This does not mean," explained John T. Flynn, chairman of a special committee of five appointed by the board to look into the problem, "that the noninstructional staff ought not to have some form of protection. A tenure by-law for the noninstructional staffs was not submitted because the committee could not complete its study of the noninstructional staffs in time to make intelligent recommendations to the board of higher education.

"The committee has under way thorough study of the composition of the noninstructional staffs, their method of appointment, their duties, along with a job analysis, in order to enable it to recommend a system of appointment for the future, of job classifications and of the type of protection to be given to the various noninstructional groups. This study and the recommendations we hope to be able to submit at the beginning of the next academic year."

Security in a position, however, is in no way absolute, for the board has set up an elaborate system for suspending or removing persons having tenure, for "incompetent or inefficient service, neglect of duty, physical or mental incapacity, or conduct unbecoming a member of the staff," the last provision not to be "so interpreted as to constitute interference with academic freedom." The accused will in all cases be served with a copy of the charges against him, have ten days in which to file an answer and be entitled to legal representation and witnesses at a trial before at least three board members.

At present, all teachers are appointed to the college staffs by heads of departments or other administrative officers. Under the new by-law the board has reserved the authority to prescribe by resolution "physical standards and examinations as a prerequisite for appointment to the temporary and permanent instructional staffs," a provision that may in the future lead to a system of examination for teachers similar to that operating in the city's lower schools. But transcending the tenure by-law

in importance and educational significance is the measure democratizing the control of the colleges and providing for the reorganization of the instructional staffs.

The new by-law went into effect on October 1. The presidents will continue to be the "expert advisers and chief executive agents of the board and shall have the affirmative responsibility of conserving and enhancing the educational standards of the colleges," but they will henceforth be merely the chairmen of committee on faculty personnel and budget composed of academic deans and department heads in each of the four colleges.

In addition, the faculties will be reorganized so as to include instructors on the permanent staff—a distinct innovation—together with such other members of the staff as the faculty may add because of their educational responsibilities. In colleges in which there are constituent schools faculty conferences are set up to act as "coordinating bodies with respect to problems of administration, budget and educational policy as these affect the interrelation of the several schools." At present this applies only to the City College, where there are separate faculties for each of the four schools: arts and science, engineering, education, business and civic administration.

While the faculties will be responsible for all matters pertaining to "the administration and formulation of the curriculum, the granting of degrees and the administration of student discipline and other educational affairs customarily cared for by a college faculty," provision is made for the delegation of these powers to a smaller faculty council wherever a college or a school has more than 100 members in its faculty. The purpose of this is to increase the efficiency of the faculty and merely means that the faculty council will exercise the powers in the first place, subject to review by the faculty.

The faculty council will consist of the president, deans, directors and three delegates from each department where available. The delegates will be the department chairman, another member of professorial rank and an instructor, all elected for a three year term by secret ballot.

In departmental self-government provision is made for the election of chairmen by permanent members of the department, for the initiation of appointments and reappointments by the departmental committees, advancement only by majority vote of those in the ranks above a candidate for promotion and scrutiny by the president of the department's operation.

"The new measure is the most forward step yet advanced in the field of higher education in giving faculties more democratic administrative control," was the comment of one influential member of the board. "The old system is antiquated. The president tends to be an autocrat, for the faculties are composed only of men of professorial rank, who owe their promotions to him, as is true of deans and directors. Consequently, they generally are all subservient to him and he can use his powers with despotic force, as is frequently the case not only in the city colleges but in universities throughout the country.

"We found here that the tendency of good men was not to come to the colleges. The presidents wanted 'yes men' on their faculties and promotions were given not so much for scholarship as for subserviency. The board was given to understand that there would be overwhelming opposition to the new measure, but that was not the case. At Hunter College, which has probably the most conservative faculty in the four colleges, a poll was held and 203 out of 244 persons did not favor the old system. Besides, the new measure was approved by the faculties of the four colleges of the city."

Salvaging the Handicapped

WILLIAM BLAKE JACK

IN Portland, Me., as well as in many other school systems of the country, definite types of service are offered handicapped children.

There are many types of handicapped children, those handicapped spiritually, financially, socially, mentally, emotionally or physically. Never before has the handicapped child in our schools needed more careful consideration than in these days of social unrest, because of the confusion of opinions, the complexity of ideals and the conflict of ideas that arise.

A more complete conservation of our human resources is certainly as important as the conservation of our crops and other natural resources about which there is so much concern.

The teacher of today must have a twofold vision: (1) he must look at the individual child and (2) he must look out of the classroom window into the world in which the child must live.

The first and almost paramount requisite of the teacher of handicapped children is to recognize that unseen character handicaps of fear and doubt and discouragement, like all mental handicaps, are as real as physical handicaps. To help wisely and sympathetically in surmounting whatever handicap of disposition or character these children possess is one of the objectives of all teachers in atypical classes.

Another kind of human salvage which this teacher undertakes is to interpret the needs and problems of these pupils to the community and to obtain for them a fair and courteous deal on the part of the public and especially on the part of employers. With some slight adjustment, many of the older handicapped youths are able to give exceptionally valuable, faithful and worth while service to employers.

Class or race prejudice is one of the great handicaps which many children may inherit or acquire. It is one of the aims of the Portland schools to help break down unwarranted barriers of prejudice and to encourage the pupils to appreciate real worth in character and ability wherever they may find it.

Sympathy for the handicapped also must be developed.

Tell Your Editor

LAURENCE R. CAMPBELL

HEADLINE hunters of the modern press sometimes make head hunters of their readers, school people included. Scalped regularly and repeatedly by remote control, editors should label some columns not "exclusive" but "explosive." But the editors will never know; their subscribers won't tell them.

Even the best editor gets ornery now and then. He deliberately loses friends and alienates subscribers. We readers huff and puff until our blood pressure is up and we run a temperature, but we don't seize the telephone or use the typewriter before us. Instead we spout before the family or friends but never get around to telling the editor how to run his paper.

As a matter of fact, newspapermen are just as smart and decent as the next fellow, but they have to meet their deadlines or join the breadlines so they report in haste and retract at leisure. Somewhere they may have heard or read that the newspaper is a social institution, a public utility, a sacred trust, but it is more likely that they have learned that the landlord and the grocer, who also talk of service, collect their bills regularly, if they can.

Why tell the editor? Speaking straight from the shoulder is an American custom old as it is quaint. We tell the telephone operator when she gives us the wrong number, we tell the motorist who dents a car fender, we tell the merchant who sends us an inferior product, we even tell the family. So the editor need be no exception.

What shall we tell the editor? You might tell him if you like his paper, its news stories and feature articles, its editorials and columns; you might, but you won't. Besides the shock might prove too great for a veteran newspaperman.

Names make news and nuisances but linotypers' lapses may disturb your equilibrium. When the press refers to your daughter not as a "comely" but a "homely" bride or when you are described not as a "battle-scarred" but a "bottle-scared" legionnaire, you have another call to duty.

The editor probably has your number already. Either you are always trying to break into print or to keep out of print, so it's your privilege to tell him when he forgets your classification. It may make you feel better.

Not all complaints need be trivial and inconsequential, irrelevant and immaterial. You need not be concerned with how the editor treats you, but with how he treats your club or church or lodge. Perhaps you want publicity for an annual banquet or minstrel show so you slave over a long article for the editor. The next day you discover that he boiled down your masterpiece to a few paragraphs. You were an A-pupil in senior English so it's not easy to understand the editor's ingratitude for your efforts.

An administrator who tells his community about the schools is first going to tell his editor about them. Editors are receptive and considerate of the schoolman's criticisms when they are socially constructive

Does it concern you or your children when newspapers play up the sensational angles of crime and scandal, when they thrust liquor and cigaret advertising near the comics, when they distort stories on local politics or print Washington dispatches that are really editorials? You would defend your family with your life if a thug should invade your home, if a flood should swirl through the streets, if a fire should sweep your section of town. Yet do you protect them from gutter journalism? Certainly they must be aware of the grim realities of life but they need not be subjected to false interpretations of those realities in the daily press.

Grumble to the Editor

Social adjustment in American democracy is retarded when newspaper readers won't tell the editor that they want better newspapers. We may grumble to our friends but we give the editor neither constructive nor destructive criticism.

Some one will tell the editor. Cranks, yes, but also those who oppose civic reform, better schools, law enforcement, public safety. As a consequence, the editor is not likely to want to fight by himself the battles which the so-called decent and respectable people won't bother to fight.

Few editors are unwilling to hear what their subscribers have to say. Walk into any editor's office and you will find him busy but seldom too busy to consider your point of view. In fact, he may be more considerate of your point of view than you are of his, and you may discover when he tells you what he knows that there may be something in his viewpoint, too. You can tell him, he can tell you, and you'll both feel better than before.

As for those editors who won't listen to one person's complaint, it is likely that they will listen when you get ten or fifty or a hundred of your friends to join you in telling the editor.

America today has the best newspapers in the world. It will have better newspapers when more of us tell the editors what we like and dislike about their journalistic merchandise and attitudes.

Let's Look at the

KENNETH E.

THE curriculum, as a body of activities that meet the educational needs of the learner, is a concept to which many give approval but few give any significant application. Much curriculum literature has developed around the ideas embodied in the topic and many curriculum writers have advocated these ideas as an integral part of our public school program.

Some of these ideas are desirable basic elements in a school program: (1) that the object of education is the individual learner and that schools are instituted to help the individual learner in his efforts to become educated; (2) that the pupil attends school to learn and learning should be considered an active process; (3) that schools are supported in the belief that they will improve the living of people in democratic society. There is a faith on the part of parents that their boys and girls will be just a little better men and women than themselves because of the education that they receive, and they are willing to support education as long as the schools justify this faith.

In addition to these rather generally acceptable assumptions, there are trends in curriculum development that are pertinent. When Harap[1] made an analysis of the courses of study on file in the curriculum laboratory at Teachers College, Columbia University, in 1935, he found a rather distinct trend toward the functional types of courses. By "functional" Harap referred to those courses in which the objectives are in terms of accomplishments in individual and social behavior.

Another indication of trend toward the consideration of needs in the curriculum is supplied by Hand[2] in the book entitled "The Changing Curriculum": "The primary focus of the curriculum is apparently being transferred from subject matter to the inclusive needs, interests and purposes of students living in a democracy. Thus such matter becomes a means to the end of more abundant living. Reliance on textbooks is giving way to a recognition of the valuable learning experiences afforded by excursions, experiments, surveys, investigations, round table discussions, pictures, interviews, the cinema and a host of other activities."

Still another indication of trend is reported in a significant study by the Department of Secondary School Principals[3] in the "Report on the Functions of Secondary Education": "to satisfy the important immediate and probable future needs of the students insofar as the maturity of the learner permits guiding the behavior of youth in the light of increasingly remote but always clearly perceived and appreciated social and personal values."

In the committee's discussion of this function, there are many significant statements, of which this one is pertinent: "There is no other defensible reason for educational effort than its ultimate power to serve the needs of mankind. The modern trend in schools is definitely toward

The divergent views of laymen and schoolmen converge on one idea: that human needs should be basic to the school curriculum. The author is superintendent, Long Beach, Calif.

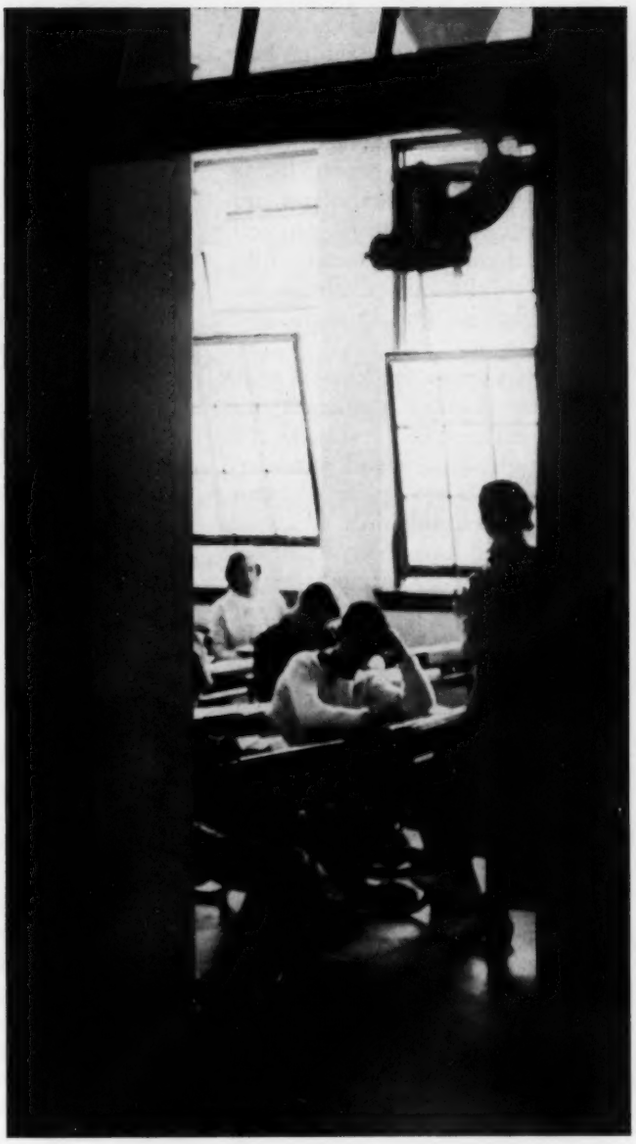
[1]Harap, Henry: A Survey of Courses of Study Published in the Last Two Years, Journal of Educational Research, May 1937.

[2]Harap et al.: The Changing Curriculum, D. Appleton-Century Company, 1937.

[3]Department of Secondary School Principals of the National Education Association. Functions of Secondary Education. Report of the Committee on the Orientation of Secondary Education, 1937.

Curriculum

OBERHOLTZER



This slice of classroom life would indicate that to keep older pupils interested in school the curriculum must fit their needs closely.

bringing education more directly into the service of human needs."

So we gain from these three studies an indication of a trend toward the consideration of the curriculum as a body of activities that meet the educational needs of the learner.

The question of needs as a basis for the curriculum is largely a matter of the definition given the term "needs." If the term is interpreted broadly enough, both subject matter and experience curriculum proponents may be entirely satisfied. In order that we may have some common idea of the term "needs," suppose we use the definition given by Hopkins in the book by Harap[1]: "The unit of experience is any particular instance of an individual interacting with a situation within the environment. When a change, either within or without the individual, causes the equilibrium to be upset there occurs a strain called need, want, wish and the like. To satisfy this need the individual moves against the situation to relieve it. This results in a change in him and the situation."

To say that the schools should be concerned with every upset in the individual's experience is no doubt asking too much. Hence, there must be an evaluation of the needs by both the learner and the teacher if there is to be a profitable selection. Probably the most acceptable single way in which to evaluate these needs is in terms of the aims that are approved by the learner and the teacher. Surely, the concept of needs as a basis of curriculum does not deny the concept of values or aims in education.

There are certain immediate felt needs of children which may be considered highly desirable as points of departure for curriculum development, whereas others may not be considered so desirable, if the needs are considered in relation to the acceptable values of life. It seems fatuous to believe that all curriculum development should spring from the immediate felt needs unless perhaps we hold to the view that all school work should be developed without any preconceived plan from day to day. To this we cannot subscribe. The teacher, as a more mature individual, should act as a guide not only in evaluating immediate felt needs but in helping the learner to recognize the more remote future needs in which he may become interested. Certain needs are fundamental.

Our thinking follows a route somewhat like this: We first recognize the need, then we try to evaluate it and to meet the need in accordance with this. Our needs are sources of activity, or points of departure in curriculum development, whereas our aims are points of reference by which we are guided in our evaluation of the needs.

The concept of interests has a vital relation to this concept of needs. We are here considering human needs as the mainspring or source of interests. Interests, then, are those powerful motivating factors that give rise to activities that satisfy needs. Recreation is probably one of the most widely recognized social needs of today. The conditions imposed by modern civilization are responsible for the variety of interests that have developed to meet this need. The more complex our civilization and the higher the general degree of intelligence, the greater the variety of interests. It seems logical then for us to consider interests as the dynamic element that gives character to the activities of people in their

efforts to satisfy their various needs.

Various writers on the subject have classified human needs into categories. Hopkins, for example, has classified them into biologic needs, social needs and self-needs. Immediate and remote, periodic and continuing, personal and social, physical, mental and emotional growth, childhood and adulthood are other classifications that we find in curriculum literature.

There has been a tendency in some quarters to discount the needs that children express and recognize (as bases for elementary and secondary school work), but great attention has been given in adult education to needs that have been expressed and recognized by adults. But, if education is to be both a living and a preparation for living, we cannot altogether ignore the expressed needs of children. Possibly there has been too much reliance on the verbal and written expression of the more forward members of a group of children, but we need not rely on this source altogether. There is at least one reliable source of typical needs in the better experimental studies of child growth.

There are certain periodic needs in the growth of children and certain continuing ones that the curriculum should meet. The need for sex information is an example of the former, whereas the need for expression or communication is an example of the latter. Communication includes certain immediate interests as well as certain future interests of the individual in relation to his part in the social situation.

Process of Maturation

In deference to the maturity of the learner, we start with a rather narrow range of interests in relation to communication and expand to a much wider variety of interests. As the process of maturation goes on, interests develop and the need becomes not simply communication of ideas by speech or writing, but it becomes a matter of writing advertising copy, writing news stories, writing sales letters, speaking to customers and speaking to audiences. Thus needs are given character by interests. Education then becomes a means of meeting the needs of the learner through his activity and through his pursuit of interests.

Certain socially significant needs the young learner may not foresee but experience has shown them to be profitable for his consideration. These should form a part of the general curriculum for young people. There are certain health needs, for example. Certain kinds and varieties of foods are essential to development. If we were to leave this matter entirely to the expressed needs of children, it is doubtful whether there would be such healthy development. Studies of certain environmental areas have shown important shortages in health practices which become socially significant and, therefore, important for education. Our public educational program must take into account important social and personal needs of citizens.

But you ask: "How are we to arrive at all these personal and social needs that we should consider in our schools?" Bobbitt, Charters, Snedden, Ballou and others would have us derive needs from studies of human activities, which they consider as direct reflections of the needs.

There is another general source that may be helpful in arriving at the needs. If one examines the technical literature of sociology and economics or if one goes to the unclassified literature found in current magazines and newspapers, he will find problems that confront our people. Some analysis will be necessary in order to discover these problems but, when found, they too will express certain persistent recurring needs of our people.

The work of Homer P. Rainey and others on "Youth Problems" shows that there is a growing tendency to exclude youth under 21 years of age from employment. About one-third of our youth between the ages of 16 and 25 years are not employed and are not in school.

It is evident that our schools are not appealing to this large growing number of young people. We are not offering the curriculum that actually meets their needs or so many of them would not be out of school. Much of our secondary school curriculum, particularly, springs from a body of subject matter which we try to relate to certain needs, but we do not seem to be achieving the desired results in this way. If we are to meet these needs adequately, it seems to us that we must have a more direct functional approach which takes off from the need and which uses such subject matter as will assist in the satisfaction of the need rather than an approach which takes off from the subject matter and which then tries to relate it to certain needs.

May I not offer some observations from the standpoint of a superintendent who sees the development of curriculum in a school system as a result of many forces? I will grant that the desirable curriculum in any schoolroom is developed by, with and for pupils under the guidance of the teacher, but aside from and back of the teacher's activities and the pupil's activities are certain pressures, philosophies and practices that are largely external to the classroom.

More Action, Less Talk

For example, most of the large areas of subjects or activities that are included in our curriculum are greatly affected by legislative prescriptions. The study of Flanders and others shows important legislative influences in the curriculum. We have always been greatly affected by the interests and demands of many professional, social and economic groups. Often these groups have demanded certain things in the curriculum because they believed that there were certain needs the schools could meet. The layman desires that the public school meet certain well-defined needs of living as he sees them.

We schoolmen may think of the curriculum in terms of certain ideals and ultimate aims, but the great body of laymen and patrons see it from the standpoint of meeting certain immediate and future needs in their lives and in their children's lives. Our public schools are then truly effective, purposeful and indispensable in the minds of those upon whom we rely for support. Human needs should be basic to our public school curriculum and the curriculum should include those activities that meet the educational needs of the learner. Probably our greatest immediate need is more action and less talk.

State Associations on Federal Aid

Although a survey of 43 state teachers' bodies has revealed that these groups favor the principle of federal aid for schools, actually most of them do not want it under the terms it is now being offered

ARTHUR H. RICE

THE principle of federal aid for schools *without federal control* is endorsed by most of the state teachers' associations. Out of 43 associations[1] that cooperated in a recent survey, all except three indicated a favorable attitude toward some form of federal subsidy for public education. The exceptions are Colorado and Nevada, where no definite policy has been adopted, and Massachusetts, which reports that "in general it is neutral or uninterested in federal aid."

The expression of approval has taken the form of formal resolutions adopted by the organizations, such as reported by California, Maine and New York, or in official endorsement of the Harrison-Black-Fletcher Bill or its successor, the Harrison-Fletcher-Thomas Bill.

Mississippi, for example was "wholeheartedly" for the Harrison-Black-Fletcher Bill. Kansas "backed it." Oklahoma "favored it." Tennessee "endorsed it." Undoubtedly a number of other states took favorable official action toward it. Michigan endorsed the Harrison-Black-Fletcher Bill but has not endorsed the Harrison-Thomas Bill. Neither has Ohio, which reports that "it does not approve certain features of the Harrison-Fletcher-Thomas Bill."

A realistic evaluation of the replies from these 43 state organizations leads to the conclusion that although these groups officially favor the principle of federal aid for schools, actually most of them do not want it under the terms that it is now being offered. The reader will need to analyze these replies from the various associations to determine for himself whether this conclusion is justified.

The majority of the states have approved the idea of federal aid with a big intangible "if." The "if" is expressed in such terms as these: "if state aid is to be retained"; "if for public schools only"; "if control is left with the state legislature"; "if there is no drastic federal control"; "if for equalization purposes without control," and "if control of all funds is vested in the state and local school districts."

Just as definitely, several states are not impressed by the cries that federal control lurks ominously in currently proposed national legislation. Mississippi states it was wholeheartedly in favor of the Harrison-Black-Fletcher Bill and Kansas approved federal aid "for all purposes" provided there is no drastic federal control. These states recognize that federal aid automatically involves some degree of federal control, but they feel that such control is the lesser of two evils (the other being the urgent need for more funds for public education).

One stumbling block to the Harrison-Thomas Bill is the objection of several states to the permissive use of federal funds for sectarian education, even if the responsibility rests with the state legislature, as proposed in the Harrison-Thomas Bill. Idaho, for instance, reports that federal aid is approved by it "for public schools only," and Iowa writes, "Some people honestly opposed the last bill introduced in Congress because of its relationship to sectarian education."

There seems to be a wide diversity of opinion as to the appropriate use of federal aid for schools. Utah, for instance, believes that "this aid should be used only for the operation and maintenance of schools," whereas Michigan urges that federal control can best be avoided by allocating the funds for school building purposes only. Georgia favors funds "both for building and for operating costs." Missouri favors it "without limitations as to purpose," and Kansas seconds the motion by favoring it for "all purposes." Montana would have it for "equalizing purposes."

The resolution adopted by the New York State Teachers Association is especially significant since New York heads the list of wealthier states that would contribute more into federal aid for schools than it would receive in return. The New York resolution reads: "This association records its belief in the necessity for a program of federal aid sufficient in amount to guarantee a nation-wide minimum program of education. It is understood that the control of all such funds shall be vested in state and local school districts."

So that the reader may form his own conclusions, the attitudes of state associations toward federal aid for schools are briefly summarized here. Unless otherwise stated, the state is in favor of federal aid for schools:

Alabama: "With minimum control from Washington and with maximum control of grants by the state government."

Arizona: "If state control is to be retained."

Arkansas: "Favors it."

California: "Association's resolutions favor increased federal support for public education in the state."

Colorado: "No definite policy."

Connecticut: "We favor federal aid for schools and we have so noti-

[1] States not included in this report are: Delaware, Maryland, New Hampshire, Oregon and Rhode Island.

fied our congressional representatives."

Florida: "Agrees with Harrison-Black-Fletcher Bill and with most of Reeves Report."

Georgia: "For both building and operating costs."

Idaho: "On an equalization basis, without federal control, and for public schools only."

Illinois: "Favors federal aid programs in general."

Indiana. "Control should be left to state legislatures."

Iowa: "Major portion of our people are favorable to federal aid. Others are honestly opposed because of its relationship to sectarian education."

Kansas: "For all purposes provided there is no drastic federal control. Backs Harrison-Black-Fletcher Bill."

Kentucky: "Highly favorable."

Louisiana: "Favors it."

Maine: "Opposition . . . has appeared to have disappeared almost wholly. Resolution passed by the Maine association annually for several years favoring such aid."

Massachusetts: "Neutral, or uninterested."

Michigan: "For building purposes only."

Minnesota: "Without federal control."

Mississippi: "Wholeheartedly for the Harrison-Thomas-Fletcher Bill."

Missouri: "Without limitations as to purpose."

Montana: "For equalization purposes without control."

Nebraska: "We feel that we must have federal aid for education, since present federal grants of the matching type place such a heavy drain on our state revenues. Federal aid for education or no federal aid of any type is the common feeling among our school people."

Nevada: "Taken no action on the question."

New Mexico: "For maintenance of schools with state control of its expenditures. We approve the Harrison-Fletcher-Thomas Bill."

New York: "For nation-wide minimum program of education with control of funds vested in state and local school districts."

North Carolina: "Favorable."

North Dakota: "Not limited to or for school building purposes."

Ohio: "Not in favor of certain provisions of the most recent federal aid bill."

Oklahoma: "Favors the Harrison-Black-Fletcher Bill but has not taken action on the later bill."

Pennsylvania: "The national interest in our education citizenry demands greater federal participation in school support. We urge that the federal Congress proceed at once to recognize this responsibility of the federal government by the enactment of appropriate legislation to assist the several states in financing their public school programs. 'Appropriate' means without federal control."

South Carolina: "Favors it."

South Dakota: "Without conditions attached by U.S.A.; that is, use of funds be left to the state legislature to plan."

Tennessee: "Endorsed the late Harrison-Black-Fletcher Bill."

Texas: "Favors it."

Utah: "Aid should be used only for the operation and maintenance of schools. The building program can and should be taken care of by the local districts."

Vermont: "Without federal control."

Washington: "Provided that such aid does not involve federal control of school policies."

West Virginia: "Sentiment is now undoubtedly favorable to the proposition."

Wisconsin: "Favors it."

Wyoming: "We do not wish any additional federal control."

Will states get federal aid without federal control? Did Shylock get his pound of flesh without a drop of blood?

The reservations or the qualifications with which the majority of states have endorsed federal aid again lead to the assertion that a large number of the state associations are lukewarm toward the various current federal aid propositions.

Small Children in School Control

HUGH V. PERKINS

PIONEER thinkers throughout the world long have recognized the importance of the school program in training citizens for the state. The Founding Fathers of our own country early emphasized the importance of an educated citizenry to the establishment of an enduring democracy.

While trained professional teachers long have accepted the responsibility for teaching children to live and work with others, a successful plan for pupil participation in school control is an added means to this end.

In the elementary school and particularly in the school containing grades 1 to 6, preparation for adult citizenship is a remote objective. For such a school, the purpose of pupil cooperation in school control should be more immediate than that of preparation for adult life. Such a scheme permits the substitution of planned cooperation for the conflict between recognized standards of conduct and antisocial behavior.

Plans by which children cooperate in school control permit the development of latent talents for leadership through exposing children to responsibilities and assisting in their success. This is particularly important in the elementary school before self-confidence becomes impaired through academic and social defeat.

Those who work with elementary children are aware of their impelling urge to do something. Children do not make good "stuffed shirts." If a child has an office he wants to do something about it and with it. If it is one in which he can render a real service it claims his allegiance so long as he is sure of its value. Furthermore, this very activity becomes at once a badge of office and a challenge to new experience.

Children's cooperation in school administration is their contribution to the on-going life of the school. The organization through which pupils share in school control should be simple and has an added value if it is centered in a functional program of service or of activity whose value is generally recognized.

Teacher Training

Deviates at North Carolina

G. B. PHILLIPS

THERE are three well-defined administrative approaches to the problem of teacher training: (1) the normal school, or distinctly teacher training college, where the major emphasis in program has been for teachers; (2) the school of education as a separate unit of the university or the liberal arts college, and (3) a department of education as a part of the liberal arts college.

Weaknesses that have existed in each system have justified further investigation in the hope of developing a more effective system, especially in universities and colleges of liberal arts.

The University of North Carolina at Chapel Hill has experienced the results of a school of education and, more recently, of a department of education. Under the school of education an attitude of conflict developed that was unfavorable for leadership in the field. When the program of university consolidation came into being the school was abolished and the local department of education was established. This was to become the basis upon which to build an administrative setup, often talked about but never actually given a chance to function. Out of this experience and study impetus was given to put the plan into action.

The New Plan

Consolidation provided a division of education for the greater university, which was responsible for promoting an educational activity throughout the entire university. Under the general and specific powers granted this division, it became possible to organize a local division of teacher training at Chapel Hill. Consequently, in the fall of 1937, the president of the university authorized a special committee from the department of education to work out the details of the proposed division for presentation to the advisory board. The plan which is described was adopted by university officials. The program was the result of a cooperative effort inspired by the president of the university and the dean of administration. Consistent, careful work of the investigating committee of the department of education provided the working basis for the members of the department who, after careful study, approved the plan that was submitted to the president. Upon its adoption by the advisory board, representatives of the subject matter fields responded by adjusting former courses and by providing new ones to meet the new demands.

The plan actually makes teacher training a definite responsibility of all departments of the university. This removes occasion for misunderstanding and shifting of duties relating to teacher needs. The following outline gives a statement of the purposes and responsibilities of the division:

1. The various departments concerned with teacher training shall be unified for the purpose of guiding students in planning their programs.
2. The head of the department of education shall be the chairman of the division of teacher training.
3. The division of teacher training shall be composed of the members of the department of education and at least one representative from each of the other departments in the college of arts and sciences.
4. Members of the division of teacher training shall be nominated by the head of the department concerned and the division chairman in joint conference and shall be appointed by the president of the university.
5. The division shall have the power within the legislation of the general faculty (1) to create an advisory board; (2) to set up standards for the selection of students; (3) to approve courses in the teacher training program, and (4) to formulate and administer programs for the preparation of public school teachers.
6. All students preparing for public school teaching shall be under the guidance of the division, although other avenues will be kept open.

An advisory board was elected in 1937 to represent all groups of the university. A committee also was appointed and instructed to study the problem of student selection and to report a plan back to the division for further consideration. This committee has been making an extensive investigation of procedures throughout the country.

Subject Matter Programs

Another committee was appointed for each subject matter field in which teachers are being trained and instructed to formulate undergraduate programs of teacher training to be adopted by the division. The committees were guided by the following principles:

1. The beginning teacher should have a broad general knowledge of his subject.
2. The usual type of departmental major may not be in harmony with future needs of students who are preparing to teach.
3. The comprehensive examination should assume that the student has a broad general knowledge of the subject rather than mastery of some specialized phase of his field.
4. The programs should provide for differences in interests as far as possible within the certification regulations of the state department of education. If any of these regulations are of doubtful value the state department should be requested to modify them.

Another important phase of the program deals with student guidance and program direction. The definite procedure has been adopted as a

basis of careful individual guidance of all pupils from the time they decide to enter the profession until they are actually guided into a position through the placement service. It is expected that this service will continue to follow university students who are teaching to aid them in adjustments and promotions and to guide their future professional study. The plan as adopted is as follows:

1. All students preparing for teaching shall be referred to the chairman of the division of teacher training: (1) for guidance and advice about entering the teaching profession; (2) for admission to the division of teacher training, according to a plan approved by the division; (3) for approving courses in education, and (4) for general advice in choosing the fields in which the student prepares for teaching.

2. The chairman of the division shall refer the student for advice to the department which he chooses as his major teaching field, and the courses shall be planned within the regulations of the division of teacher training.

3. The student's program for each quarter shall be approved by the chairman of the division of teacher training.

4. Complete records for each student shall be kept in the office of the chairman of the division of teacher training.

5. Facilities for placing students in teaching positions shall be centered in the office of the chairman of the division of teacher training.

A careful analysis is being made of the type and distribution of professional courses in the teacher training program. At present the normal program begins with an introduction to education. In this course a background is provided by which the student may determine whether or not teaching is the type of work he desires. In addition, the instructor will use the program as a screening process for uncovering real talent and redirecting those who appear unfitted for further work in the field. Those who continue in education go into educational psychology, which is followed by the work in general methods. The student is then ready for the materials and methods courses as a basis for the required practice teaching which is at present carried on in Chapel Hill schools.

Possibly, some cadet teaching can be developed in the public schools of the state to supplement this local training program. The final professional course is an elective to be chosen from several fields. One course is being offered that will attempt to acquaint the beginning teacher with many of the practical problems that will be met when he takes his first position. It will point out many apparently unimportant personal elements that have in many cases meant the difference between success and failure: professional ethics, community relationship, personal problems, types of positions, professional growth, legal status of the teacher and the art of getting along with people. It will attempt to give the student confidence as he approaches his first assignment.

This new division of teacher training constitutes a fourth approach to the problem of training teachers. It eliminates some of the difficulties that have existed in the other plans and opens up to an entire university faculty the opportunity to participate in the selection and the training of the secondary teachers who are in the final analysis going to influence the educational efficiency of future college students. University officials realize that the plan is in its first stages and are aware that mistakes will be made before it is well established. There is general enthusiasm, however, about the new program with its possibility for larger service to the public schools.

Mutual Employment Policies

POLICIES in employment of teachers mapped out for Iowa boards of education and school administrators by a special committee indicate that the welfare of the schools can be served to the best advantage when the interests of boards of education and teachers are considered together.

After reviewing the present situation, the committee reached the following conclusions:

1. The problem of teacher employment is equally serious for all types of schools.

2. Boards of education should look to their superintendents for leadership in finding qualified teachers.

3. Teachers whose school work or personal demeanor is not satisfactory should have immediate sympathetic counsel from their superintendents.

4. Election of teachers should be held during April; in smaller schools reelections would be made later than at present and in some larger systems reelections would be made earlier.

5. The practice of inserting in teachers' contracts clauses that provide for release only upon payment of specified sums should be discontinued. If such a clause is considered essential, it is recommended that the amount of such a penalty should not exceed the cost of locating a replacement and that the penalty should not take effect until August 1.

6. Teaching positions in many schools can be made more attractive by the following methods: (a) limiting the high school program of studies so that no teacher will be required to instruct in more than two or at the most three subject fields; (b) making the work of the school so stimulating and life in the community so desirable that teachers will be reluctant to leave, and (c) omitting from contracts reference to matters of personal conduct and other details that reflect upon the caliber of the teachers and the policies of the board of education.

7. A teacher who is contemplating a new position should make this desire known to the superintendent or the board of education of the school to which she is under contract.

8. The board of education, rather than the teacher, should assume responsibility of assuring that the qualifications of a teacher meet those set forth by statute or the department of public instruction.

9. The board of education is entitled to the confidence of its teachers and a measure of protection against those who prove unfaithful.

Intercepting Juvenile Crime

Alarmed by the increase in juvenile delinquency, Nashville set about to intercept crime through its attendance adjustment department. As a result, the attendance of problem children was 88 per cent perfect for the year

SAM ALLEN

Hume - Fogg High School in Nashville at which investigations are held.

THE attendance adjustment department of the public school system of Nashville, Tenn., was established as the result of a survey that revealed an alarming increase in the number of children appearing before juvenile courts charged with delinquency and even more serious crimes.

A careful investigation of all the facts revealed that a large number of these cases could have been prevented if they had been identified earlier in the school career of the offenders. The juvenile court did not reach the child until he had gone wrong and the school authorities decided that if a child could be kept in school every day, he would have fewer opportunities and impulses to commit offenses that lead to the juvenile court.

The old-time method of dealing with truancy and delinquency through suspension or expulsion from school had proved a failure. Every child-caring institution in the state was filled to overflowing with both male and female offenders and it was necessary that some plan be put into effect in Nashville that would check the increase of delinquent and predelinquent children.

The attendance adjustment department was created in 1934 to investigate and adjust all complaints of illegal absence, truancy and other violations of the compulsory school attendance law arising in the schools, without resorting to the juvenile court. This department faced a difficult social problem for there was no institution such as a detention, parental or boarding home where confirmed delinquents could be confined or restrained.

An organization was set up, with a director and a secretary to put the conference adjustment plan into operation. The director is a school official familiar with the compulsory school attendance law, working permits, state workshop and factory inspection and other laws relating to children. The director presides at the sessions of the attendance adjustment department. There are four attendance officers to supervise the attendance of 20,000 white and colored children enrolled in the grammar schools. One officer is a Negro, who looks after the Negro schools.

The staff consists of a director of attendance, secretary, four attendance officers, a chief medical director, two assistant medical directors, four nurses and the part-time services of a psychologist and psychiatrist from Peabody and Vanderbilt.

The department conducts a school court, similar to the school courts in Chicago, Detroit, Rochester, Philadelphia and other cities. The main difference between the Nashville school court and those of other cities is that Nashville has made this department a separate unit of its child accounting system.

The secretary is required to attend all sessions and to keep a case work record of the proceedings. She also makes quarterly reports to the board of education of the work of the department. While investigations in the school court follow juvenile court procedure, the records are purely administrative.

Investigation sessions are held each Saturday morning at 9 o'clock in a room used for meetings of the board of education. They have no semblance of formal court procedure. The whole intent of these hearings is to arrive at the real reason for a child's deviation and by kind, sympathetic understanding of his problems to work out some plan that will permit him to remain in school or to return to school.

When a complaint is made against a child, a record of all the facts in the case is placed before the director. This record gives a picture of the child's mental and physical condition, school record, home and family environment and outside environment, together with a detailed statement of charges filed against the child by the attendance officer and his recommendation as to the case's disposition.

Attendance officers are trained in elementary case work methods of investigation, analysis of evidence and the filing of reports. All facts relating to a case are included in the record in order to avoid needless argument or discussion.

As a rule, a child is placed on probation, given another chance and paroled either to the principal of his school or to some other qualified person. The child is required to report on each school day to the person to whom he is paroled and a constant check is made of his conduct and attendance.

Principals are required to report to the central office the first day's ab-

sence of any probationer and a report is sent to each attendance officer of all absentees in his district.

The director of the department keeps in close touch with all pupils paroled to the schools, through visits to the schools and homes. He writes letters of commendation to pupils who have made an unusual record for attendance or good behavior or who are promoted to a higher grade at the end of the school term.

Through these visits and personal contacts with parents in the home, a closer relationship has been established between the teacher and the parents and the attendance and attitude of pupils toward the school have been improved.

At the Saturday morning hearings, the child, his parents and the director confer privately. If the parent is careless, negligent or unresponsive and does not cooperate with the school, the child is temporarily excused from the room. An effort is made by the director to arouse parental interest by impressing upon the parents the value of regular attendance and of the training the child is receiving, not only in education but in obedience, punctuality and respect for the rights of others.

In cases in which the child is a known delinquent, confirmed truant or is unadjusted socially, he is placed on probation to a social welfare worker who keeps in touch with him during his probation. In all cases he is returned to his own school or transferred to some other school in his district.

When a pupil has shown no improvement and has been referred back for a second or third hearing, the case is transferred to the juvenile court as a final measure.

The following extract from a report made by the department for the 1937 spring term will show the work accomplished and the results obtained under this experiment.

Table 1—Total Cases Investigated and Adjusted

Year	*Number of Cases*
1934-35	162
1935-36	182
1936-37	235
Total	579

Table 2—Total Cases Referred for Further Hearings

	Number of Cases	*Per Cent*
Second Hearing	37	15
Third Hearing	7	3

The attendance of these problem children was 88 per cent perfect throughout the school year. Before the "conference adjustment" plan was put into operation, these children were out of school from ten to forty days during the school term.

It has been aptly said, "To prevent delinquency you must begin with the high chair instead of the electric chair."

The delinquent child is positive evidence that either something or somebody has failed. Lewis E. Lawes, celebrated criminologist and warden of Sing Sing prison, said in an address on "Crime, the Challenge the Schools Must Meet": "Let the schools step in where police and courts and law have failed. Were I an educator in authority, I would say to judges and lawyers and legislators, 'Hands off! Leave our youngsters to us! You have made a mess of things. Give us a chance!'"

Work for Student Councils

LILLIAN K. WYMAN

A WELL-ORGANIZED and well-managed student government association in a senior high school is the largest contributing factor in training for citizenship and leadership in that citizenship. The earlier phases in inculcating student government ideas and the formulating of practical plans for their working out are a necessary type of foundation work.

In the development of student government at William Penn High School, Philadelphia, through the years, outside influences are increasingly evident. Strange "literature" is circulated among the pupils. Messages come from the outside on multicolored fliers exhorting all those interested in liberty to attend mass meetings, to parade, to help gain councils. Walkouts are staged under the name of peace demonstrations. We all are familiar with these outcroppings of good principles run amuck.

What shall we do about it?

1. Renew and redouble our efforts in emphasis on character training. Let us get back to fundamental principles in teaching honesty, truth, courage, loyalty and faith in God and our fellowman.

In this fundamental training the schools are bearing more than their share of the burden. The parents should take more responsibility and not leave it all to the schools. They blame the schools when results are unsatisfactory. Parents and teachers should recognize the truth that character training without real religious foundation is hollow. In this the public school cannot, of course, satisfactorily function.

2. Teach the boys and girls citizenship, which is an outgrowth of character and is dependent upon it for best results.

Trends of trying to gain concessions by violence must be met and conquered if we are to preserve democracy. In school government pupils must learn balance and poise, the necessity for calm and impartial reasoning, for rising above mob spirit and for considering the greatest good for the greatest number.

If student councils are not used on these vital problems as well as on matters of school routine, they will soon be futile puerile attempts at playing at government. Anything that does not function is bound to deteriorate. Youth want to get their teeth into hard nuts which they themselves have cracked.

Therefore, in order to meet the challenge, "How Can We Save Our Boys and Girls for Democracy?" we must redouble our efforts in training in character and citizenship. This can best be done in our high schools through student government and its application to the problems in the outside world.

Educational Qualifications for School Board Members

M. M. CHAMBERS

SERVICE on boards of education is for laymen as distinguished from professional educators. Hence the statutory qualifications for eligibility are usually silent as to educational attainments. Apparently, however, our American faith in education is occasionally coupled with a feeling that its lay control should not be entrusted to persons who are themselves without a reasonable minimum of schooling.

Since 1924 Kentucky has had statutes prescribing educational qualifications for membership on county boards of education. The act of that year merely stipulated that eligibles must be "possessed of a common school education" and neither defined the term nor specified any method of proving the qualification.

This stood until 1932, when it was changed to require completion of the eighth grade, with a proviso that board members in office when the act took effect could be reelected regardless of the change. In 1934 the section was repealed and reenacted, with the additional provision that all persons thereafter elected should be able to show their completion of the eighth grade by one of three methods: (1) reference to the records of the school attended, (2) affidavit of the teacher under whom the work was completed or (3) passing of an examination held by the state board of education.

Under this latest act several suits have reached the state court of last resort, resulting in the removal of some unqualified board members and producing some interesting judicial definitions of what the act requires.

In one case it was alleged that none of the five members of the Pulaski County board of education was qualified. However, three of them, having been in office prior to 1932 and having been reelected in 1933, were obviously saved by the provision then in force permitting reelection without regard to qualifications, and the court so held. The fourth, elected in 1935, was able to furnish an affidavit by the teacher under whom he had completed the eighth grade in 1914 and, consequently, was qualified. The fifth, also elected in 1935, had admittedly never progressed beyond the sixth grade and accordingly his office was declared vacant.[1]

In the same county similar suits were later brought against the three members of the board elected in 1937. All three were removed from office. The first member produced an affidavit by his former teacher to the effect that he had completed the sixth grade in 1908, "which, as she then taught it, was equivalent to the present eighth grade, as they now teach same in the common schools." This was adjudged insufficient in view of the fact that the state course of study in 1908 provided for eight grades, and there were at least three properly graded schools in existence in the county in that year. Accordingly, this member was disqualified and ordered removed.[2]

A measure of "book larnin'" as proof of competency for members of lay boards of education is a rare experiment that has developed in Kentucky

The second member furnished an affidavit by his former teacher deposing that she taught him in 1912, that he was a good pupil and proficient in whatever grade he was in when she taught him but she could not remember what grade it was. He also offered an affidavit by another person who said she had known him all his life and was in the eighth grade with him in 1912 and that he passed it. Neither of these affidavits, nor both of them, meets the requirement of the act of 1934 and hence the ousting of the board member was upheld.

The third member was disqualified on entirely different grounds, under another section of the statutes which reads: "No person shall be eligible to this office who at the time of his election is directly or indirectly interested in the sale to the board of books, stationery or any other property, materials, supplies, equipment or services for which school funds are expended." The defendant was a teacher in the county schools at the time of his election to the board, and hence was directly interested in the sale of services for which school funds are expended.[3] A member of the Leslie County board also was disqualified on the same ground.[4]

Another member of the Leslie County board, when challenged regarding his educational qualifications, having been first elected in 1935, made the mistake of filing a demurrer to a complaint alleging that he possessed no education beyond the fourth or fifth grade and had produced no evidence of being qualified as required by the statute. Now a demurrer by its very nature admits the facts alleged but maintains that they do not constitute a cause of action under the law. In this case the trial court erroneously sustained the demurrer and dismissed the complaint, but on appeal the judgment was reversed and remanded

[1] Commonwealth ex rel. *v.* Griffen et al., 268 Ky. 830, 105 S. W. (2d) 1063 (1937).
[2] Commonwealth ex rel. Meredith *v.* Norfleet, 272 Ky. 800, 115 S. W. (2d) 353 (1938).
[3] Whittaker et al. *v.* Commonwealth, 272 Ky. 794, 115 S. W. (2d) 355 (1938).
[4] Commonwealth *v.* Begley, (Ky.), 117 S. W. (2d) 599 (1938).

with instructions to overrule the demurrer and proceed.[5] This will undoubtedly result in the removal of the board member unless he is able to comply with the statute.

Suits were also brought against three members of the Simpson County board, elected in 1937. One of these produced an affidavit by the widow of his former teacher under whom he had completed the eighth grade. She deposed that she acted as substitute teacher for her husband two or three weeks during the middle of the school term and that the defendant was in the eighth grade and doing the work successfully. He also furnished affidavits by classmates to the effect that he had completed the eighth grade. All this was insufficient to satisfy the statute, said the court, and his office was declared vacant.

The other two members under attack furnished satisfactory affidavits from the teachers under whom they had completed the eighth grade, but the attorney general contended that this evidence should not be held sufficient until the defendants had either produced the records of the school or explained their absence. In other words, the three methods of proof mentioned in the statute, said he, were specified in order of rank, and the second and third methods should not be admitted until the first had been disposed of. This view the court refused to adopt and held that the three methods were equal alternatives, any one being equally efficacious without the others.[6]

In a further effort to disqualify one of the board members, the attorney general exhibited a photostatic copy of his signature and a sample of his handwriting to show his lack of education. Patently this was of no avail, for it bears no relation to the statute. Said the judge, no doubt with a twinkle in his eye: "If handwriting is a true test of one's educational qualifications, several members of this court, as well as the attorney who filed this exhibit and whose signature appears at the end of the brief, should be classed among the illiterate."

[5]Commonwealth *v.* Wilson, (Ky.), 117 S. W. (2d) 935 (1938).

[6]Commonwealth by Meredith, Attorney General, *v.* Moye et al., 273 Ky. 384, 116 S. W. (2d) 952 (1938).

In one of the foregoing cases the court discussed in detail the three methods of proof stipulated in the statute and went somewhat beyond the necessities of the immediate issue to voice the dictum that, under the third method (examination provided by the state board of education), a candidate would not necessarily need to offer evidence that he had ever passed any grade in any school. However that may be, the setting up of an educational qualification is a comparatively rare development.

It would be an egregious mistake to suppose that the winning of diplomas or degrees is in itself conclusive proof of general competency, but probably our public service would gain much if we recognized such attainments as minimum prerequisites for eligibility as well as persuasive evidence of intellectual and practical capacity. Plato would have had his ideal republic ruled by educated men. Admitting that his plan seems scarcely practicable in our day, it is still possible to believe that we lean too far toward the opposite extreme in local government in America.

A Check List for Principals

MARIAN TELFORD

IF THE safety program of your high school is adequate you are able to check the following items. Others may be included, but these are essential.

1. The school building is inspected periodically. Special attention is given the gymnasiums, shops and laboratories. Complete cooperation is given local and state authorities responsible for the inspection of school buildings.

2. The athletic program is under the direction of a full-time athletic teacher or coach, medical examinations are required before pupils are allowed to participate in intramural or interschool competition, the playing floor or field is adequate in size and in good condition, personal equipment is suitable to the needs of individual players, participants are properly conditioned and aided in the development of the skills required in the various activities in which they take part, pupil leaders are properly trained, first aid and medical service and, if necessary, hospital service are available.

3. Pupils are aided in the development of skills in recreational activities that are nonschool activities but are hazardous to individuals of high school age.

4. Procedures have been established for the collection of data on pupil accidents resulting in absence from school.

5. The development of safety skills is a recognized part of all vocational or manual arts courses.

6. The development of attitudes and skills essential to safety is considered in courses that deal with character and social relationships.

7. Basic information on highway, home, recreational and occupational hazards is given to all pupils through carefully prepared units in related courses. The development of driver training courses is recognized as a desirable outgrowth of introductory classroom discussions of traffic safety, such driver training to be included in the program of the school when the technics of driver training have been developed, teachers trained and equipment made available.

8. A pupil safety committee or council has been organized and provided with the guidance of an interested faculty member for the development of channels through which to reach the entire school enrollment.

9. The principal has assumed responsibility for the interpretation of the philosophy of the safety movement to the members of his faculty.

10. Helpful published safety materials are available to pupils and teachers.

11. Patrons are informed and interested in the safety program of the school.

12. Contact has been established between the high school and the official and private agencies working for safety in the community.

Today there are seven states that permit the excuse and dismissal of pupils from the public schools for purposes of religious instruction. Photograph at the right by courtesy of the board of education of Elizabeth, New Jersey.

Religious Influences in Public Schools

L. W. KINDRED

IN THE October article, the nature and kinds of constitutional clauses imposing restrictions upon the use of public funds for nonpublic schools were enumerated. In the paragraphs that follow will be discussed court decisions and statutes that embrace other forms of indirect aid to private and parochial schools as well as issues concerned with religious influences in public educational institutions.

Where questions have been raised involving religious tests and qualifications as a basis for the employment of teachers, the courts are in agreement that a board of education may select any person as a teacher in the public schools without regard for religious belief, and that it is within the discretionary power of the board to hire teachers of one faith as against another provided the candidate for employment is not rejected solely on grounds of religious convictions. It is also within the power of a board of education to discharge a teacher whose views and beliefs, based on religious ideas, militate against a proper discharge of the duties and responsibilities assumed when the position was accepted.

In cases considering the question of teachers wearing religious garb or dress in the classrooms of public schools, it has been held that a statute forbidding the wearing of such garb or dress is not an infringement on the constitutional guarantees of religious liberty as such a statute is directed at the acts, not the beliefs, of teachers. Moreover, the wearing of a religious garb does not constitute the teaching of a sectarian doctrine nor create sectarian control prohibited by the constitution, but, in reality, it has the effect of creating a sectarian influence which falls within the meaning of the constitutional restriction against the use of public funds for any school or institution under the control of a sectarian denomination.

It has been held, however, that the wearing of a religious garb in the public schools does not convert the schoolhouse into a sectarian institution and does not bring it within the meaning of the constitutional prohibition against the giving of aid to any institution under sectarian control. No teacher in the public schools, however, can act as a proselyter in favor of any religious sect or organization.

The wearing of religious garb by teachers in public schools has been the subject of legislative enactment in three states. Statutes exist in Nebraska, Oregon and Pennsylvania making it illegal for any teacher in a public educational institution to wear a garb, dress or insignia of a religious order or society while engaged in the performance of his or her duties.

Another question that has received more attention than the employment of teachers concerns Bible reading and religious exercises in public schools. Statutes were found in 22 states that expressly prohibit the use of sectarian books and the teaching of sectarian doctrine. In six states, however, Bible reading is permitted by statute, while in 13 other states the law requires that the Bible shall be read in the classrooms of every public school. In a few states laws have been passed providing for a daily recitation of the Lord's Prayer, the display of placards containing the Ten Commandments, protection against exclusion from the public schools on account of religion and penalties for the violation of the statutes pertaining to Bible reading and religious teaching.

Where the question of Bible reading and religious exercises in public schools has been submitted for judicial review, it has been held by courts in 13 states that the King James version of the Bible is not a

sectarian book and that reading from this book without note or comment does not constitute the giving of sectarian instruction.

On the other hand, it has been held by courts in six states that the King James version of the Bible is a sectarian book and that reading from this book without note or comment constitutes the giving of sectarian instruction contrary to the constitution. The same courts have expressly or tacitly denied the constitutionality of exercises consisting of the recitation of prayer and the singing of religious songs.

Constitutional Guarantees

In answer to specific constitutional questions related to Bible reading and religious exercises in public schools, a majority of courts have taken the position that reading the Bible without note or comment, reciting prayers and singing religious songs do not violate the following constitutional guarantees:

1. Each person shall have the right to worship according to the dictates of his own conscience, especially where a child is excused from attendance and no attempt is made to induce pupils to accept divergent views in matters of religion and worship, or where a child is expelled from school for reasons of conduct during religious exercises that in no way prescribe a devotional act or require anyone to join in prayer or maintain a certain physical position.

2. No one shall be required to attend or support a place of worship, as such provision was intended to prevent the assessment of taxes for the construction or repairing of a building dedicated exclusively to religious worship, and not the casual use of a public building for prayer and religious worship.

3. Public money shall not be used or appropriated in aid of a sectarian school, as this provision was designed to prevent any appropriation of public funds for schools under the control and supervision of a religious sect or denomination.

4. A person shall not be discriminated against on grounds of religion where attendance of a child at religious exercises in public schools is optional and where he is not required to do anything contrary to the dictates of his conscience or deprived of any right stipulated in the constitutional guarantees of religious liberty.

A minority of courts have ruled that Bible reading in public schools, reciting prayer and singing religious songs violate such constitutional guarantees as:

1. Each person shall have the right of free exercise and enjoyment of his religious profession where children are required to be in attendance during religious exercises and to explain passages read from the Bible, or to take part in prayer which is essentially a form of worship, or where children are or are not excused from such exercises for reasons of conscientious religious objections.

2. No preference shall be given or discrimination made against any religious sect or denomination where teachers are requested to read from the Bible and assume leadership in prayer in the presence of Jewish children, or even where a child is excused from attendance at such exercises in a public school.

3. No one shall be compelled to support or attend a place of worship where the Bible is read without comment, as Bible reading converts the classroom into a place of worship.

4. Public money or property shall not be appropriated for any sectarian purpose or for any sectarian school, as the Bible is a sectarian book and reading from this book constitutes the giving of sectarian instruction.

In passing upon two issues subsidiary to the broad general question of Bible reading and religious exercises in public schools, the courts have held that it is within the discretionary powers of school directors to expel a child who fails to comply with prescribed rules of conduct during Bible reading and religious exercises, and the courts are without authority to review the actions of school directors who are vested with the management and control of public schools unless they fail to exercise properly the discretionary powers given them by law.

The controversy over Bible reading and religious exercises in public schools has given rise to the practice of releasing pupils during regular school hours for instruction in religious subjects. In litigation which has come before the courts on this subject, it has been held that a board of education may act within its statutory authority in denying children admission to the public school building following a violation of regulations prescribed by the board against attendance at religious services during school hours. Such denial, the court ruled, does not infringe upon constitutional guarantees of religious liberty, since all citizens, regardless of sect, must respect and abide by general state laws.

At the same time, a board of education cannot release pupils during regular school hours for attendance at religious education classes conducted outside of the public schools since this practice violates the compulsory education laws which require attendance for the whole school day; nor can a board of education give high school credit for Bible study based on a syllabus or outline supplied by the board, and require teachers to administer, correct and assign credit from examinations for such study because this amounts to a use of public funds for sectarian instruction prohibited by the constitution.

Legal Difficulties in Way

On the other hand, it has been held that the practice of releasing pupils for religious instruction for one period each week for which regular recitations are not scheduled does not violate a constitutional prohibition against public aid of a sectarian purpose or institution or the statutory requirements regarding compulsory education. Today there are seven states which permit the excuse of children from the public schools for religious instruction.

The findings presented above constitute a definite statement of the law relative to the specific questions discussed. These findings show not only the position which courts have taken but also the nature and scope of judicial conflict. From these decisions and the statutes enacted in several of the states, it is apparent that practical legal difficulties stand in the way of any satisfactory solution to the problem of using public funds for nonpublic schools and issues concerning religious influences in public educational institutions.

Corn Belt Economy

BARTON MORGAN

THE reorganization of rural elementary education to eliminate many small one teacher schools rests upon the assumption that these schools cannot offer as great educational opportunities at a reasonable cost as larger school systems. That there is inequality in educational opportunity in the United States is indicated by the following:

Expenditures per pupil in average daily attendance: rural schools, $53.31; city schools, $92.68.

Average salary per teacher: rural schools, $787; city schools, $1735.

Average value of school property per pupil enrolled: rural schools, $151; city schools, $347.

The problem of providing adequate facilities for the education of rural boys and girls was recognized as serious even in Horace Mann's time. That the problem of reducing to a minimum the number of one teacher schools has not been solved is indicated by the statistics given in table 1, supplied by Dr. W. H. Gaumnitz of the U. S. Office of Education.

In the total number of one teacher schools, Illinois leads the nation with 9990; Iowa is a close second with 9215. Missouri with 7296, New York with 7251 and Kansas with 7167 come next in order. North Dakota and South Dakota lead the nation, however, in the per cent of teachers in one room schools. They have 54.9 per cent and 53.2 per cent, respectively. The states having less than 5 per cent of their teachers in one room schools are California (3.9), Connecticut (3.8), Massachusetts (1.5), New Jersey (0.9), Rhode Island (1.6) and Utah (1.6). The average percentage of teachers in one room schools for the nation is 16.6 per cent.

The problem of reorganizing rural elementary education to reduce to a minimum the number of one teacher schools has been nearly solved in some states while in others it has not.

Iowa has 9215 one room rural schools. The average enrollment in these schools in 1932-33 was only 15.8 pupils; the average daily attendance was 12.6. These ungraded rural schools of the state enrolled 29 per cent of the entire number of pupils, employing 38 per cent of the teachers. The first class cities, on the other hand, enrolled 23 per cent of the pupils of the state but employed only 16 per cent of the teachers. The enrollment is not only small now, the trend is downward. According to a recent study, the birth rate per thousand persons in Iowa, which was 76.9 in 1850, 35.0 in 1880, 27.4 in 1899 and 19.0 in 1930, is estimated at 15.7 for 1950 and 13.0 for 1975.

Iowa has 109 two room schools, 13 three room schools, 409 consolidated school districts and 524 other graded school systems located in towns and cities. The consolidated schools and the town schools are well distributed over the state, averaging approximately nine per county or one for every two civil townships.

The situation is favorable for the closing of many small rural schools and educating their pupils in the near-by graded schools. Arrangements for such a plan could be made through a contractual agreement between the school boards concerned and it would likely prove popular if it could be done without additional cost.

The purpose of the study was to determine to what extent it was possible to close the one room rural schools and to transport the pupils to near-by town and consolidated schools without increasing the cost significantly, not more than 3 per cent in any community. It was not designed to offer a final solution to the problem of rural school reorganization but rather to gather certain information which should be helpful in any attempt to solve the problem. The study in itself has no relation, therefore, to any patented schemes for improving rural education. The data gathered should not be regarded as an argument either for or against the so-called "county unit" or "consolidation."

The information was gathered by field workers who went into 30 of the 99 counties of Iowa and obtained the needed data from official records. The general nature and sources of the data were as follows: (1) records of the county superintendent of schools; (2) records of the county auditor, and (3) records in the town and consolidated schools.

The county engineer and the Iowa State Highway Commission supplied information relative to types of roads and contemplated improvements of highways in the counties studied.

With the exception of the highway maps, the data gathered were for the school year 1932-33. That year was chosen because it was the last one for which the cost data of Iowa schools were available at the time the study was begun.

The first step was to determine for each of the given graded school systems how many additional children, if any, it might receive and instruct properly in the elementary grades without incurring any considerable expense for the remodeling of buildings or for additions. When this number of children had been ascertained, it became possible to determine from what particular near-by, one room schools the desired pupils might be drawn. This problem involved such considerations as dis-

Table 1—One Teacher Schools in the United States

	Total Number of Schools	*Total Enrollment*	*Median Salary of Teachers*	*Median Training of Teachers*	*Average Length of Term*
White	120,542	2,410,840	$535	4 yrs. 7 mos.	165 days
Negro	18,000	504,000	263	4 yrs. 2 mos.	132 days
Both			517	4 yrs. 7 mos.	160 days

tance from the graded school system, nature of the roads over which the children would have to be transported, savings that would be effected through the closing of the rural schools and other similar ones.

When the one room schools that could be closed to greatest advantage had been determined, a calculation was made of the total cost of maintenance of these schools for the school year 1932-33. Likewise the total 1932-33 cost of maintaining the graded school system to which the children would be sent was determined.

Calculating Comparable Costs

Following this, a calculation of the probable cost of operating the graded school system after the contemplated additional number of rural pupils had been enrolled in its elementary grades was made, and the annual cost of transporting the rural children to and from the graded school system was estimated upon the basis of comparable costs elsewhere.

In this way it was possible to determine in what communities it was possible to close a portion of the one room schools and transport the pupils to near-by town or consolidated schools without increasing the cost in any case more than 3 per cent.

The findings of the investigation are presented herewith for 227 communities, located in 30 representative Iowa counties.

1. The proposed reorganizations were planned on community bases. Each community included an existing town or consolidated school as a center and the near-by rural schools as tributaries. If any given rural school could be brought into a proposed school reorganization at a saving to the community or at an increase in cost of not more than 3 per cent, it was included. If the cost was greater than 3 per cent, it was excluded.

2. In the 30 Iowa counties studied it was found that the schools of 191 communities could be reorganized without increasing the cost in any community, the average saving being a little more than 6 per cent. If the proposed reorganizations were allowed to increase the cost as much as 3 per cent in certain communities, then the schools of 227 communities could be reorganized at an average saving of about 5 per cent. Data from 10 counties indicate that all the one room schools could be closed at about 8 per cent additional cost.

3. If the proposed reorganization were carried out in the 191 communities, the pupils from 1135 rural schools, or 37.6 per cent of the total number of such schools in the counties studied, might have been transferred to existing graded school systems without increasing the cost in any community. If the proposed reorganizations were carried out in the 227 communities, the pupils from 1341 rural schools, or 44.3 per cent of the total number of those schools, might have been transferred to existing graded school systems without increasing the cost in any community more than 3 per cent.

4. The aggregate number of rural children who might have been transferred in this manner to graded school systems in the 191 communities was 16,136, an average of 538 per county; in the 227 communities the number of rural children was 19,408, an average of 647 per county.

5. The number of teachers in the ungraded rural schools that would have been closed was 1059 in the 191 communities and 1263 in the 227 communities. The additional number of teachers that it would have been necessary for the graded school systems to employ was estimated at 340 for the 191 communities and 444 for the 227 communities.

New Median Enrollment

6. The number of pupils enrolled per teacher ranged from 13 to 47 in the existing graded elementary schools. The median was 26.5. In the ungraded rural schools the enrollment per teacher ranged from 3 to 51 with a median of 15.1. In the reorganized systems, as planned, the range would have been from 25 to 35 with a median of 31.5.

7. The median cost of transportation in the consolidated schools of the 30 counties studied was $25.24 per pupil per year. The first and third quartiles were 20.96 and 30.73, respectively.

8. No alterations would have been necessary in the school plants of 159, or approximately 70 per cent, of the 227 existing graded school systems which would have been attended by the rural children. The cost of necessary alterations in the plants of the remaining 68 was estimated to range from $180 to $20,000. The median of the estimated cost of alterations was $3125. In only three instances would the estimated expenditures for alterations of buildings have exceeded $10,000.

9. The reorganization of rural elementary education in any community as described in this paper would probably increase somewhat the high school attendance of farm children. This should be regarded as an advantage even though it would cost more. Such increase in expense, however, would not be great and might in time be partially offset by the progressive decline that is taking place in the elementary enrollments in rural communities generally.

Estimate Possibly Low

10. There is reason to believe that the percentage of rural children who could have been transferred to graded school systems without additional cost would have proved somewhat higher under practical conditions than the results of this investigation have indicated.

11. It apparently would be cheaper for rural school boards to contract with town and consolidated school boards for the education of the farm children than to consolidate. In Iowa and in many other states in which the chief source of school revenue is from the general property tax, to consolidate throws an undue portion of the burden of education upon the farmer. This is especially grievous since the farmers' per capita income is about one-half that of urban groups.

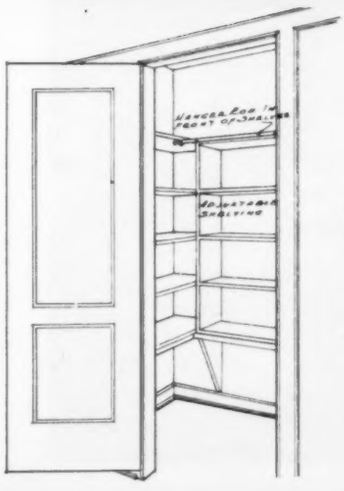
12. Nothing presented in this study suggests any changes in the existing school systems other than those which would and could at present be made purely upon local initiative. Those responsible for the study have no disposition to urge reorganization of schools in any community that is not favorable to the idea. It is our opinion that research workers in education should search for facts and make these facts available but that they should not, as a rule, become crusaders for any particular plan or program.

ELEMENTARY CLASSROOMS

Above: A flexible arrangement in Naper School, Naperville, Ill., showing the better use of floor and wall space in modern classrooms.

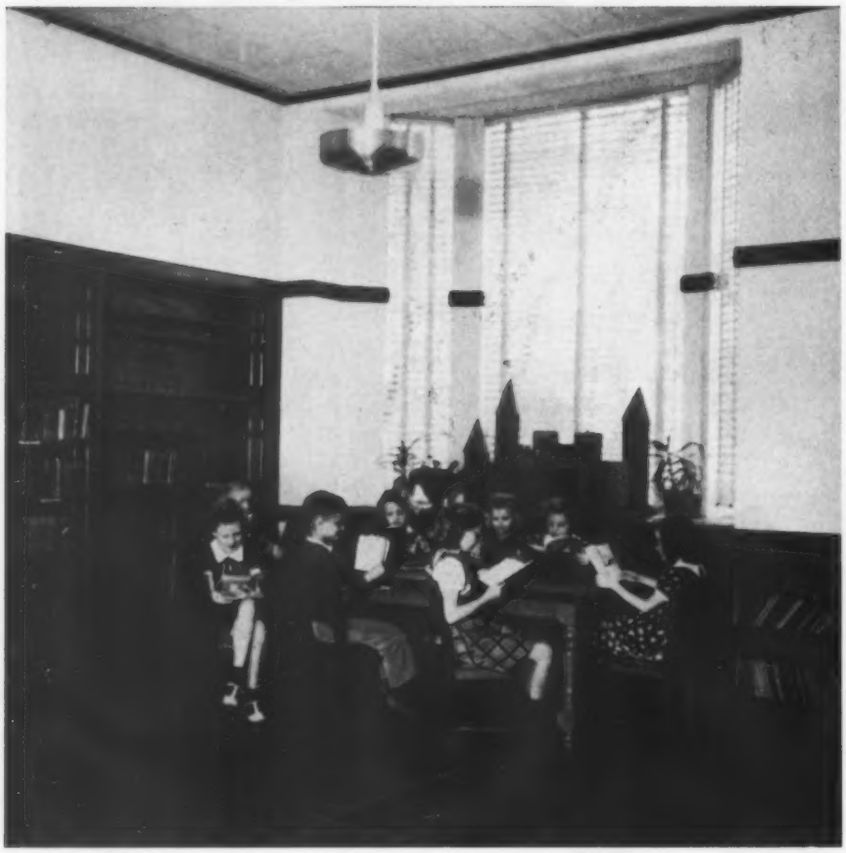
Left: This classroom reading case is a popular corner in Washington School, St. Joseph, Mich.

Below: Even the ends of corridors may be given a charming informal treatment. Witness this arrangement of draperied windows, low seat, child's lounge chair, exhibit case for various projects and receptacles for growing plants.



Teacher's closet detail, showing an arrangement that will serve many purposes. There will be room for her street clothing on the hanger rod. Adjustable shelves accommodate oversized materials.

Modern



NEW concepts of education for the small child stress the value of a laboratory plan of classroom procedure. America's best known philosopher, Dr. John Dewey, abstains from giving this method a name, but he points again and again to self-education.

Learning is to be made a joyful and satisfying experience. Many individual aptitudes are to be discovered and encouraged. New abilities and appreciations are to be created through the use of the child's skills and sense perceptions.

Certainly this requires more than the usual standard classroom. For some educators it requires a series of specialized laboratories, but others maintain that coordination and integration are best carried on in a single classroom, under the direction of one teacher. As with the kindergarten, space is the first requirement, but in the classroom tradition will interfere, a factor that is not applicable to the kindergarten since it is a comparatively new feature in education.

The kindergarten is influential sometimes in obtaining an additional unit of space for the first grades, but usually only special subjects, such as music, art, the library or science, are given more than an extra foot or two of classroom floor space in buildings housing grades 1 to 6. Child psychology demands a release from the bonds of the desk and the limitations of books. It points to a variety of activities from which the child can obtain experience that will give purpose and meaning to his books.

Tradition says that the 15 square feet of floor space that educated father shall now educate son and daughter. Financial limitations dictate that the architect and the teaching staff shall combine their efforts to effect a solution.

The logical alternative to the lack of floor area is to dispose of some of the old classroom requirements and to make better use of the floor and wall space. Every square foot of wall space, as high as the pupils and teacher can reach, must be developed for educational purposes. Even then there is only a limited portion of space for each pupil.

The cloakroom and wardrobe space will go first. Lockers built into

The fixed desk will hardly do for activities and for laboratory work.

Elementary Classrooms

WARREN S. HOLMES

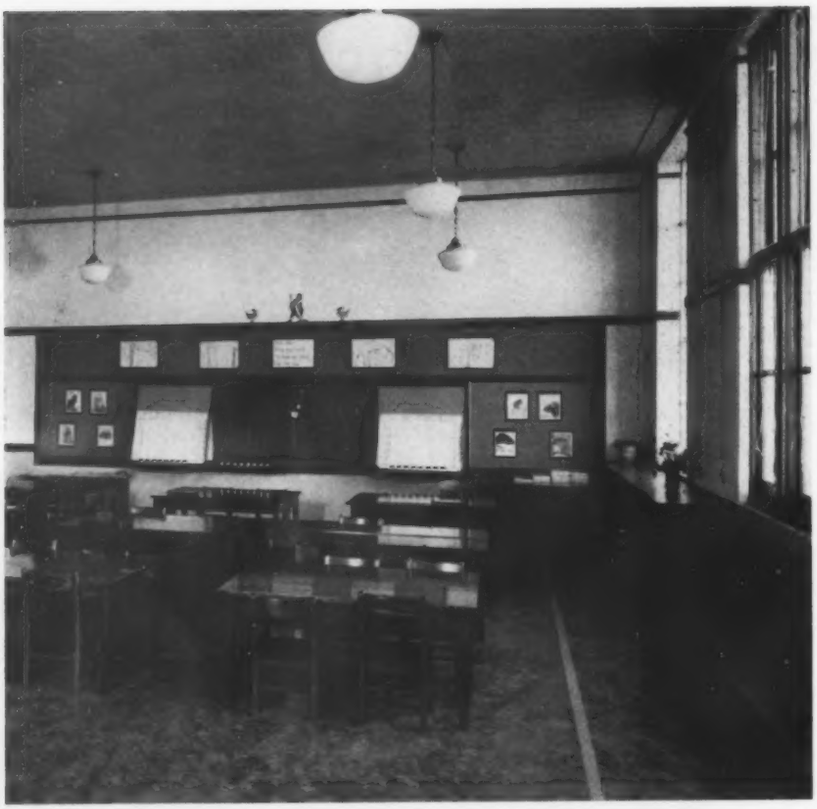
the corridor wall save this space for the classroom.

Blackboards are next in line for retirement. There are differences regarding how much blackboard space is still required, but bulletin boards and tacking space are equally important and must share with the blackboards. A solution is found in the reversible board. This invention puts a quietus on the old teacher controversy of which walls shall be chalkboard and which tacking space.

The fixed desk made for readin', writin' and 'rithmetic will hardly do for activities and laboratory procedures. Some form of movable furniture is required. Space requirements in the standard classroom (22 feet by 30 feet) permit little more in the way of furniture than the teacher's desk, a reference or work table and three or four extra chairs.

Now the essential elements of the classroom must consist of well-designed accessories and fittings to perform tasks largely new to elementary

Above: Lockers for wraps and books are an essential part of the equipment. Below: Well designed wall cases for books and for storage of pupil work and plenty of deep cupboards for larger projects are indispensable. Above, opposite page: Book interest is a prime necessity, but will always be secondary, for the child will respond first to environment.



A good solution for conflicting demands of blackboard and tacking space.

education and for which the materials are as yet poorly organized.

The architect must, therefore, adopt the school's philosophy as a text from which to develop his building. He must develop built-in features that serve specific needs and that are sufficiently flexible to serve a variety of purposes. These should be built into the walls to conserve floor and wall space. Likewise, the structural and mechanical requirements should be provided without depriving the classroom of valuable floor and wall space. The specific built-in requirements will vary for the different grades, depending on the seating selected and the age of the child.

Compartment cases, like those described for the kindergarten, will be necessary for the pupils' books and work materials when large tables are used.

Every classroom should be equipped with a spacious closet fitted with conveniences for the teacher's street clothing and for storing materials that are too large for the wall cases.

The exhibit case in both classroom and corridor is an indispensable teaching device where children are taught the technic of artistic and methodical arrangements.

Wall cases, designed for books and storage of pupils' work, with a liberal supply of deep cupboards with movable shelving, are indispensable for the larger projects.

Window sills of masonry, tile, slate or stone for potted plants, an aquarium, the flag holder, map rail, the hanging globe and, occasionally, a piano form the minimum requirements.

Good books and magazines, suitably selected to the age of the child, should be of principal concern in grade classrooms. For the upper grades, a reading case, designed with open bookshelves, pockets for maga-

At the left are shown two modern methods for displaying pupil work. Above: reversible blackboard, and below, loose-leaf bulletin board, hung above sink of stainless metal recessed in wall.

zines and letter file drawers, forms a strategic teaching device.

Book interest for the average child is a prime necessity but always will be secondary. He will respond first to environment.

The facilities of the ordinary classroom have been far too limited to fulfill this need and the result has been repression, limited interest, rote learning, irritation and often discouragement. Reading cases, exhibit cases, tackboards, window sills teeming with flowers, animal and vegetable specimens for observation and study, suitable decorations and interesting furnishings transform the classroom.

The teacher resorts to mechanics, to science, to art, to nature, to the commonplace activities of family and public life for activities in which the child can participate for experiences.

The architect and the educator must make a careful study of the material that the class uses and must work with mutual understanding and ingenuity to create environments that facilitate this process.

It is also in this philosophy of the classroom that we find justification for attractive floors, for beauty in the design of furniture and color schemes, for art work carefully related to childhood and designed to interest, inspire and activate the child to imitate and to create.

The limitations of floor and wall spaces in the standard homeroom greatly hamper the variety that is highly desirable in creating effective educational environments. This is overcome in a large measure by a plan of departmentalizing for the higher grade rooms.

A school building with special rooms for library, art, music and science is far more interesting than schools in which the environment of every room is largely determined by the homeroom requirement.

To serve elementary education adequately today, classrooms must contain well planned built-in features that facilitate an activity program. These should be combined with esthetic considerations productive of beauty and interest.

The utility side of built-in features must originate in the suggestions of experienced teachers and educators who have a special interest in the architecture of school planning.

For functional planning the architect likewise must be experienced in school requirements and interested in the details of school psychology and school procedure.

This combination of training, experience and talent forms only the background, however, for creating classroom environments that facilitate and stimulate the processes of education.

To this must be added a conviction on the part of the designers that environments actually influence the education of youth in a large measure and a knowledge of just what characteristics of environment best serve this purpose for the age of the child being accommodated.

There is being developed a distinctive architecture of education.

Child psychology demands the release of the school child from the bonds of his desk. At this hour the elementary classroom becomes a library.

Formerly the Ivy Avenue School was a two story building with gabled tile roof, wooden interior partitions and floors.

Does Reconstruction Pay?

J. WARREN AYER

UNDER what conditions is it advisable radically to reconstruct an old school building? This practical question confronts many school administrators and boards of school trustees, and the wrong answer sometimes results in unnecessary expense or in the perpetuation of ineradicable defects and obstacles to a modern program of education.

Since the earthquake of 1933, which resulted in the setting up of a new and stringent school building code in California, this question has demanded an answer in hundreds of instances in this state.

One of the provisions of the new code contemplated the inspection of school buildings by the engineers of the state department of architecture upon request of the governing boards of school districts. So insistent did the people become that schoolhouses be made reasonably safe that the boards in two of the elementary districts included in the Monrovia-Arcadia-Duarte High School district promptly ordered surveys of their buildings, while the high school board authorized the inspection of the former Ivy Avenue High School plant in Monrovia, which was then being leased to the Monrovia elementary system for the housing of the seventh and eighth grades of that city.

As a result of this investigation by state engineers it was necessary to abandon five of the schoolhouses in the high school district. All of these were of masonry exterior construction. After careful study of possible educational efficiency and of structural character by the administrative officers and by architects and engineers in the employ of the boards of trustees, two were completely razed and three were reconstructed.

Two types of rehabilitation to withstand seismic disturbances have been found practicable in dealing with masonry structures. The first consists in removing 4 inches of the outer surfaces of the exterior walls, strengthening the foundations if necessary, constructing a basket work of reenforcing steel rods 2 inches from the fractured surfaces of the walls, casting a reenforced concrete bond beam around the tops of the walls, then building out the walls to their

original thickness by means of concrete forced into place through an "air gun."

The doweling of the reenforcing rods into the old foundation and their being cast into the new beam at the top thus produce a firm and thoroughly bonded exterior shell. Interior bracing and horizontal diaphragms are provided where necessary by the use of auxiliary wood members or by the installation of structural steel beams and braces.

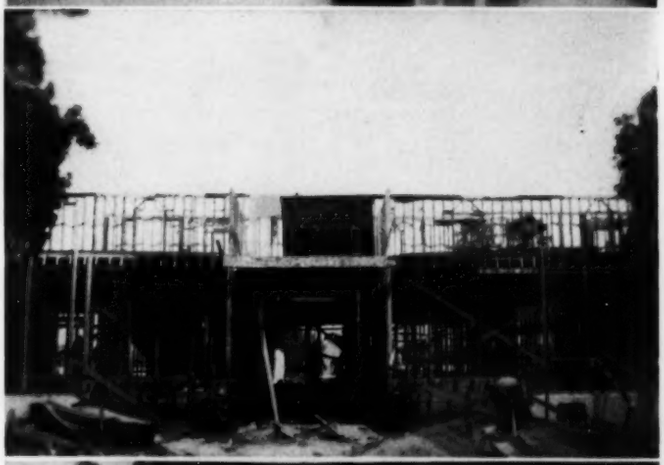
While the steel and concrete method of reenforcing possesses some advantages of greater fire resistance and probable lower depreciation, it was rejected in connection with the rehabilitation of the Ivy School in Monrovia because of its lack of flexibility, restrictions upon improved lighting, greater cost, and the probable necessity for radical alteration and strengthening of the old foundations to withstand the weight of masonry construction.

The plan adopted called for the complete replacement of stuccoed brick exterior walls with wood and stucco construction, necessitating the removal of all masonry. The original building was a two story one with gabled tile roof, wooden interior partitions and double wooden floors throughout. The date of construction was 1912 and it was not, therefore, entirely obsolete. The reduction of this plant to a one story structure constituted an interesting problem. This was accomplished by shoring up the first floor ceiling joists inside the building, pulling down the second story walls and removing those of the first story.

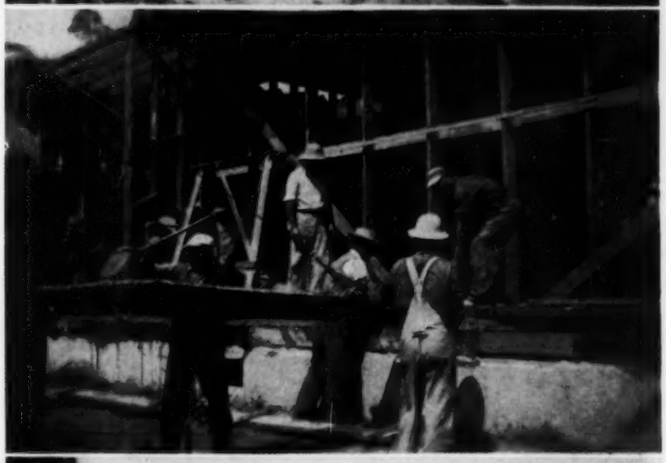
After the foundations had been inspected, and supplemented in the few places where needed, all floor structures were checked, strengthened and termite-proofed as required. The substitution of wood frame for brick exterior construction afforded an opportunity for the greatest possible flexibility of treatment both as to appearance and use. The architects took full advantage of this with the resultant emergence of a completely new appearance and usability of plant.

The interior walls had to be stripped of their wooden lath and plaster so that metal lath and fire resistant plaster could be installed to

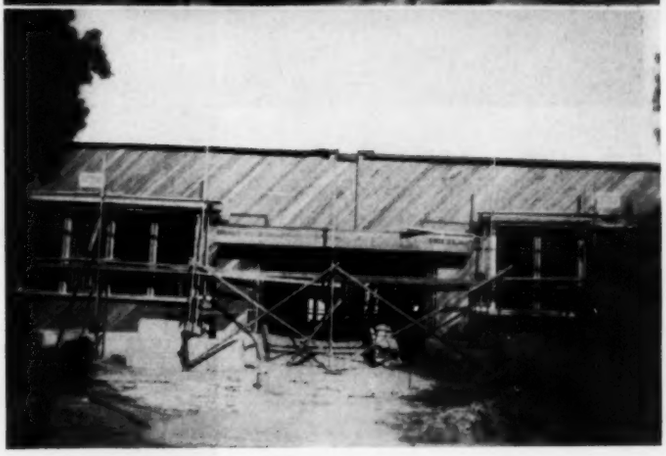
Pulling down a section of the second story.



Masonry gone, reconstruction ready to begin.



Method used in shoring up the second floor.

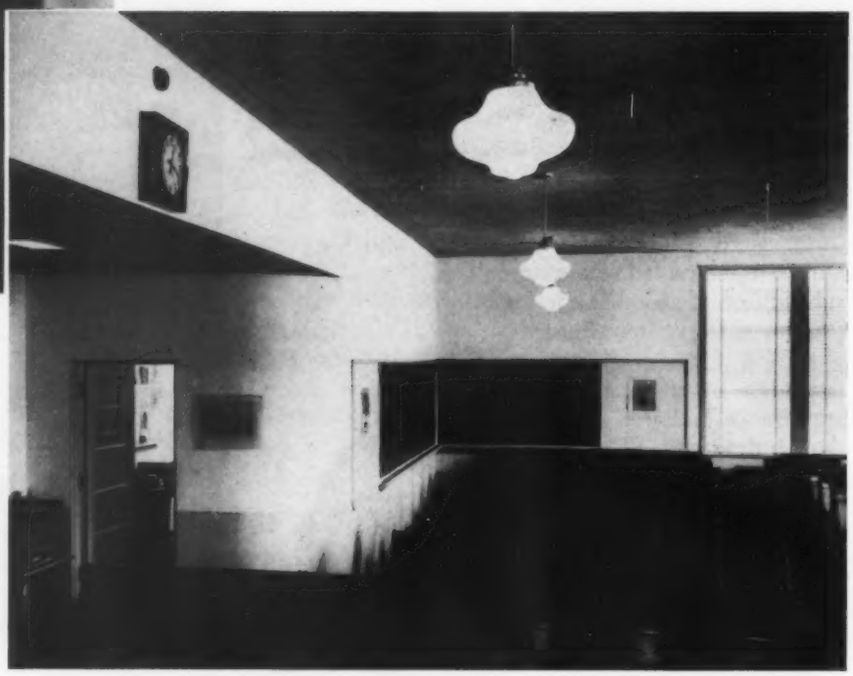


New walls are nearly ready for plastering.

Below: Windows of the triple sash type and adjustable venetian blinds enhance the warm natural lighting that floods the Ivy School's modern office quarters. During remodeling, the unnecessary office space and storage rooms were converted into two additional classrooms and the old offices were reconstructed.

Section of a reconstructed classroom. Note lighting, ample cabinet space for materials and the liberal working area allotted the teacher at the rear of the room.

Below: Section of the unit intended for a junior high school library, now used as an assembly.



Above: Main corridor, showing use of a number of skylights and recesses for lockers and rubbish cans. Cork carpet under the battleship linoleum floor covering and acoustic plaster reduce noise to a minimum in the hallways.

meet the requirements of local and state fire ordinances. This made it possible to modify interior arrangements and to obtain satisfactory acoustic effects and also resulted in an interior new in appearance and in service.

Some of the important interior changes and improvements are the following: (1) conversion of unnecessary office space and storage rooms into two additional classrooms; (2) reconstruction and modernization of the office quarters; (3) combination of two poorly arranged and deficiently lighted classrooms into a library; (4) transformation of one stair well into a teachers' room and the other into a textbook storage and library stack room; (5) building of two classrooms where a large, useless outdoor stage had formerly constituted a section of one wing of the building; (6) removal of unused cloak rooms so as to provide additional instructional space; (7) installation of many built-in storage cabinets; (8) installation of abundant and well-placed display boards; (9) installation of modern and efficient artificial lighting, and (10) the laying of cork carpet and battleship linoleum floor coverings throughout.

The natural lighting of the building is made especially satisfactory by the use of windows of the triple sash awning type and adjustable venetian blinds. Heating and ventilation are adequately cared for by the easily adjusted windows and individual thermostatically controlled natural gas heaters. While this heating system might not be wholly desirable in more severe climates it has been tested and found efficient here.

One of the most pleasing features of the Ivy School is the rather free and artistic use of color, both exteriorly and inside. While the mere naming of colors and shades would fail to convey any real impression of their effective use in this building, suffice it to say that few persons who visit it fail to receive a sense of esthetic pleasure and cheerfulness. It is indeed unfortunate that so many hundreds of opportunities to make use of this valuable asset to the development of the appreciation of the beautiful and to add to the comfort and happiness of children and teachers are being passed over by school authorities throughout the United States.

The casual reader will conclude that this was no mere renovation with some alterations but a radical reconstruction and, therefore, the cost must have been relatively high. The portions retained included the foundations, the entire first floor structure, practically all interior partition framing and all second floor members, except the finish flooring. The outcome appears to be a building just as good as a completely new one at a saving of from 35 to 40 per cent. The total cost, which included an immense amount of demolition and removal of débris, was under $70,000. The new schoolhouse contains the equivalent of 13 classroom units, offices and other auxiliary rooms for the administrative unit of a proposed junior high school.

Experience in the reconstruction and modernization of school plants prompts the following suggestions:

1. Before deciding upon reconstruction have competent engineers and architects thoroughly survey the building and attendant problems of modernization.
2. Consider it from the angle of educational obsolescence and reject any plan of alteration that will leave many out-of-date or unsatisfactory features.
3. Insist upon as accurate estimates of the relative costs of a new building and the proposed reconstruction scheme as it is possible to obtain; in either case an architect's estimates will probably be too low.
4. If possible hold one general contractor responsible for the whole job of demolition, removal of débris and complete reconstruction.
5. Be sure of the strictest possible supervision of the work, especially with regard to structural materials and problems.

Equipped for Wall Washing

WHEN the inside of a building is to be painted, if there is much wall and ceiling washing to be done, it is advisable to build a folding scaffold for convenience and safety of the workmen. It will save time when the painting crew moves from one room to another.

Instructions for constructing a scaffold of this type and other pointers on wall washing equipment, contained in "A Manual on the Construction and Care of School Buildings," published by the Oregon Department of Education, may well be timely in view of the interior refurbishing often undertaken during the Christmas holidays.

The scaffold is equipped with adjustable legs that permit it to be raised or lowered according to the height of the ceilings. It also is equipped with casters of a sufficient size not to mar the floor as it is moved from place to place. The brace and platform are high enough to clear the pupils' desks. Such a scaffold can be moved from one part of the room to another without dismantling.

When the work is completed in a room, it is necessary only to remove the drop cloth and the planks that comprise the floor of the scaffold and fold it up and move it out of the room.

When a strong cleaning solution is being used in wall washing, workmen should be provided with a good grade of rubber gloves. Gloves turned back at the cuff may be worn during ceiling washing to prevent water from running down the arms.

In Oregon schools washers are provided with large wool sponges. If a sponge is used in a scrubbing manner on a rough surface it will last a short time only. The correct practice is a circular motion in which small circles are described, the center of the sponge being moved not more than 1 inch at a time. It is a sort of rolling action.

Each washer is provided with two pails and two sponges, one pail containing the cleaning solution and the other, clear water. The pail containing the cleaning solution is marked, as this material should not be used for rinsing. A drop cloth is placed on the floor along the wall that is being cleaned.

When Light Is Made

Top: This boy was one of many who asked to take a meter home to check on the home lighting system. Center: Do convex lenses make objects appear larger or smaller than they are? This girl is finding out. Bottom: An experiment in the refraction of light as it goes from water to air.

INTEGRATION of the principles of science and the methods and attitudes of scientists with the life of the child long has been a basic precept of modern science teaching. Alert adaptation of modern commercial products and interests aids greatly in achieving this goal. Recently the growing interest in photography and sight saving has stimulated the production of small, accurate light meters that may well be added to the basic equipment of any junior or senior high school science course.

The use of light meters in the general science classes of the Lincoln Junior High School, Wyandotte, Mich., has aroused the interest of the pupils in making the principles of light dispersion and sight saving functional. The children were eager to take the light meters home to check their home lighting systems. The careful planning (developed in class discussion) and the checking required in working out these home experiments were invaluable in developing both scientific attitudes and a better understanding of good lighting principles. In considering how the home lighting system might be checked, many topics arose for discussion. Among these were the advantages of semi-indirect and indirect lighting, the need for properly adjusted brightness of light, the effect of diffusion and of glare spots on eyestrain, the rapid decrease in intensity of light with distance from a light source, the effect of color and surface on light absorption and reflection.

When the light meters were brought home, dad and mother, as well as son or daughter, absorbed something of the science of lighting. "I didn't have much time to use the meter because dad was using it all over the house," was a typical comment from many pupils when they returned the meters. Mothers were especially interested in checking the amount of light on their sewing. From reports of the pupils, from a fourth to a third of the homes tested were inadequately lighted. Too many of these homes depended upon a few scattered lamps for lighting the whole room. This gave a few spots of light which tests by the pupils showed did not give adequate light even 3 or 4 feet from the lamps. Typical results showed from less than 1 foot candle to as much as 5 foot candles of light at a distance of 4 feet from most lamps.

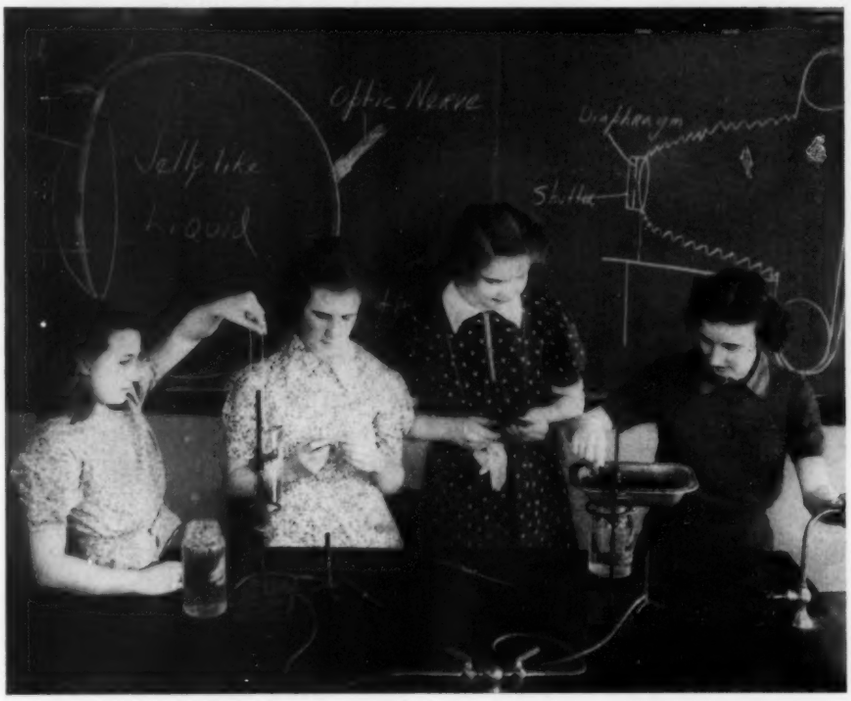
The meters lend themselves to innumerable activities which integrate the life of the pupil with the methods and principles of science. Many experiments, making use of the meters, were planned by the children. One group checked the amount of light falling on the teacher's desk in each room of the school over a period of two weeks. Another group compared the amount of light falling on pupils' desks in rooms on the north side of the building with that falling on desks in rooms on the south. Another group tested the adequacy of light in a selected group of rooms during the morning and again during the afternoon over a period of two weeks. The school council appointed a committee to check (for a period of two weeks) the amount of light near lockers which some pupils had complained were poorly lighted. Checking the variations in the amount of light falling on their own desks was required of all pupils.

Some of the other activities in which pupils used the meters included checking the amount of light at different distances from a light source to discover how much the amount of light falls off; finding what effect color has on the amount of light reflected from or passing through various materials, and measuring the difference in the intensity of the light falling on desks in a room when window shades were half way to the top and when they were all the way to the top.

Seeing how the amount of light falling on their books changed with positions of the books and with changes in posture helped develop a

Right

J. WARREN SMITH



Making candles was the most popular project.

better understanding of some of the principles of sight saving. Many pupils made candles by dipping string in paraffin. Some compared the amount of light given off by their candle with that given off by a model of Edison's first lamp bulb and a modern 100 watt frosted lamp bulb.

These are only a few of the classroom activities in which this type of light meter may be used. It is probable that it could be used to even better advantage in more advanced science classes in the high school.

Only a few light meters suitable for classroom use are on the market. One popular type is delicate enough to register from 0 to 75 foot candles in 1 foot candle gradations (and, with a simple adjustment, up to 750 foot candles by 10 foot candle gradations) yet is compact and sturdy enough to be carried home in pupils' pockets with safety. It measures just 1⅛ inches thick by 2¼ inches square.

Reading the meters is as simple as measuring distances with a yardstick. The light sensitive cell enclosed in the top of the meter is connected with a micro-ammeter just beneath which registers the flow of current on a scale calibrated to record in foot candles. Because the light sensitive cell is molded in the top of the bevel edged meter the pupil in reading the scale will naturally assume a position that will not cause his hand or shoulders materially to interfere with the incident light. A small projection on the back permits making the zero adjustment when required. Indicated on the scale and also imprinted on the metal back of the meter is the minimum amount of light recommended by the Illuminating Engineering Society for various seeing tasks, such as usual print (from 10 to 20 foot candles), newspaper (25 to 35 foot candles), rough work (5 to 10 foot candles), office work (20 to 35 foot candles), average sewing (55 to 70 foot candles).

Another meter in the low price range is slightly larger. It has a round base containing a micro-ammeter which is connected to a light sensitive cell molded in a hinged top. The scale of the ammeter is calibrated to record from 0 to 50 foot candles in 1 foot candle gradations. It also indicates the minimum amount of light satisfactory for various kinds of work. The hinged top can be swung 90 degrees from the dial to allow the measuring of the intensity of the light falling vertically without interference by the person taking the reading.

A wealth of supplementary material dealing with lighting, sight saving and care of the eyes is available. The Better Vision Institute, General Electric Company, Westinghouse Electric and Manufacturing Company and the Metropolitan Life Insurance Company are among those companies that have distributed pamphlet material at little or no cost. Among recent magazine articles are those appearing in November and December 1937 and January and February 1938 issues of *Hygeia*.

Pamphlets, a set of four large, colored wall charts and a teacher's book were used by the Wyandotte general science classes. These were valuable as motivating material as well as added references. The pamphlet, "The New Story of Light," integrated the historic, geographic, hygienic and scientific aspects of lighting and sight saving. A number of practical suggestions for classroom projects are made in the teacher's book accompanying the pamphlets.

Making candles by dipping string in wax or paraffin was the most popular project. Other activities the children enjoyed were reports on optical illusions, color blindness, telescopes, microscopes, neon signs and great men in the history of lighting; experiments in refraction of light by lenses, water and the prism; testing the eyes for change in size of the pupil, for the blind spot, for color blindness and for vision, and planning model living room lighting.

The use of light meters in the general science classes of the Lincoln Junior High School, Wyandotte, Mich., has aroused the pupils in making the principles of light dispersion and sight saving really functional

BETTER PLANT PRACTICES

Tips on Toilet Paper

What type of toilet paper is best adapted to school use? Opinion varies on this, as on every other item of school equipment. Upon only one point is everyone agreed, *i.e.* that the subject is an important one.

There are those who are firm in their conviction that rolled paper used with the proper fixture is more economical, more convenient and more sanitary, too, than the interfolded type paper with cabinet dispensers. The interfolded type, on the other hand, has many strong adherents who declare it to be thoroughly satisfactory and economical. And that's the way it goes!

Some Figures

In Lexington, Ky., you will find Ben B. Herr, business manager, an advocate of roll paper. He will tell you that with an enrollment of 8370 during the school year 1937-38, the Lexington schools used 45 cartons of paper, each carton containing 50 rolls of 2000 sheets, costing $3.20 per carton. "We have found," says Mr. Herr, "that the friction type of holder prevents waste and is fairly satisfactory. This holder would be more satisfactory, however, if it were made from a heavier gauge of metal. Our holders have a spring catch which locks when the roll is mounted and cannot be conveniently unfastened until the roll is used up." He goes on to explain that in Lexington they follow the practice of mounting paper holders on the outside of the toilet stalls, having found that this tends to reduce waste and prevent the scattering of paper over the floor.

Let us now check Mr. Herr's figures with those of LeRoy L. Smith, secretary-business manager, Fresno Public Schools, Fresno, Calif. During the last school term, according to Mr. Smith, the Fresno city schools used 73 cartons of toilet paper, 125 packages to the carton, or 9125 packages. Figuring on a per capita basis, 9125 packages of 800 double sheets, there was a total of 7,300,000 sheets of toilet paper. Enrollment for the full term of ten months was approximately 21,000 and the total cost of toilet paper was $497.58, or $0.0237 per pupil.

In Terre Haute, Ind., Loring C. Halberstadt, director of business and research, has found that they use about 75 cartons (50 rolls, 2000 sheets to a roll) for an enrollment of 1100 pupils per year. As a result of much scientific investigation, Mr. Halberstadt has set as his standard a toilet paper of an absorption minimum time not less than 120 seconds; of unglazed soft finish, free from possible wood slivers, specks, holes and other imperfections. "We prefer," he states, "a bursting strength of average five sheets tested together of not less than 12 points."

J. C. Sloan, business manager and purchasing agent at Port Huron, Mich., is another firm believer in rolled toilet paper. "When dispensed with the fixture we use," he says, "or a similar one, rolled paper is more economical, more convenient and far more sanitary than the interfolded paper with cabinet dispensers."

"Our schools," he goes on, "used during the term of our last school year 40 cartons (50 rolls) of paper. Figuring on a per capita basis, this means 40 cartons of roll paper, 2000 sheets per roll, for 7000 pupils for the full term of a ten month school year."

Now the Other Side

"We use interfolded cabinets." It is James F. Gould, assistant superintendent in charge of business affairs, Minneapolis, speaking. Bids are taken, it seems, and the lowest is accepted.

"However," Mr. Gould continues, "we have found that in the long run a better quality of paper is less expensive, as in 1937 we used 8320 packages (1000 sheets in a package) more than in 1936, simply because in 1937 we bought a cheaper grade of paper."

In the schools of Berkeley, Calif., interfolded cabinet toilet paper has been used for many years and has been found satisfactory as well as economical, according to J. L. Poulsen, purchasing agent. "The question we have always raised with using rolled paper in public toilets," Mr. Poulsen explains, "is that of sanitation. We have no intention of making any change in the near future." He frankly questions any savings from the use of rolled paper.

Another adherent of the interfolded cabinet is J. B. Imbertson, business manager at Hibbing, Minn. Not only does his school district use this type of toilet paper, but it is even experimenting with a linen service instead of paper towels. "For the last seven months," according to Mr. Imbertson, "the costs are approximately the same."

Finally, John T. Cate, business manager of the Glendale Unified School District, Glendale, Calif., speaks from experience. "We have followed the practice of using interfolded cabinets for dispensing toilet paper for many years and don't contemplate a change."

The discussion has only started. Many sections of the country have not been heard from. There are two sides to this question as to every other. Let's have more actual experiences.

News on Enamels

The new, quick drying floor enamels, we are told, enable the painter to do the job in the shortest time. While they do set, free of dust, in about five or six hours, it is best to allow them to dry overnight.

Colors of some brands of floor enamels, according to the same authority, are much improved today over the old colors, which were chiefly grays and uninteresting yellows called light oak. Now, rich dark walnut browns, dark oak, black, green, brick red and other shades make it possible to enamel floors to harmonize better with modern color schemes. It is also entirely practical to apply wax over enameled floor finishes and thus protect them while maintaining the high gloss by polishing.

Ink on Marble

One last item for the scrapbook concerns ink stains on marble. All such marks can be eradicated by making a solution of sodium perborate by dissolving 2 tablespoonfuls in a pint of hot water. This then should be mixed to a paste with whiting and a layer ¼ inch thick applied over the stain.

If by chance a brown stain remains, it might be well to try sodium citrate and glycerin, dissolving 1 part of sodium citrate crystals in 6 parts of water. Add to this solution an equal volume of glycerin, mixing thoroughly. Part of this solution is then mixed with whiting and worked with a putty knife until a thick paste is obtained.

This should be applied over the stain in a layer ⅛ inch thick, or more. When it becomes dry, which may require a few days, it can be replaced with a new layer.

A Room for Health

G. G. STARR

THE classroom is not a very good place for the pupil who becomes sick. Usually he needs to lie down and rest until disposition is made of his case. Also there is the possibility that he may have a contagious disease. Likewise, the classroom is not usually equipped to take care of injuries. In many cases private treatment of these pupils is desirable.

Since a real need for a suitable place for indisposed pupils was evident from past experience, the teachers of the Arcanum School, Arcanum, Ohio, decided to provide such facilities. This room, as planned, also can be used for other health activities.

The Arcanum school building houses all grades from 1 to 12. About half of the 400 pupils lives in Arcanum and the other half is transported by bus from surrounding territory. These factors, with others, determined to some extent the setup of the health room.

After some discussion, the various rooms that might be available were inspected to determine the one best suited for this purpose. The Arcanum School, a three story building, was fortunate in having four teachers' restrooms, which are of good size and pleasant. In each room there are plenty of window space, toilet, wash basin and heating facilities. One of these restrooms, on the second floor, was selected for a health room, because of its central location.

The next problem was to sell the idea to the board of education or to some organization interested in the school. After discussing the matter with several members of the P.-T.A., the proposition was presented at a regular meeting. The P.-T.A. voted to assume full responsibility for getting the room ready and for underwriting the expenses involved. Several committees were appointed for painting and decorating the room, selecting furniture and other equipment, including a cot, and for purchasing first aid supplies.

The committee on painting and decorations had the woodwork

The emergency corner of the health room, showing the trim first aid cabinet.

Special corner for pupils well enough to study during an observation period.

The same room also serves for weighing and measuring the pupils and for the preschool clinic.

painted white. The walls, which had recently been painted a good buff shade, were untouched.

The completed health room is divided into three areas. One corner contains wash basin, mirror, paper cup vendor, soap dispenser, paper towel container, first aid cabinet and waste basket. This unit is grouped to care for injuries. The first aid cabinet contains many shelves, those on top being used for medical supplies while the lower ones are used for storing extra bedding, towels, wash cloths and other accessories.

For the first aid cabinet the following supplies have been found useful: hot water bottle, commode, thermometer (fever), hydrogen peroxide, rubbing alcohol, witch hazel, tincture of iodine, a salve for burns, essence of peppermint, soda mint tablets, toothache drops, gauze bandage, tape, cotton, band aids, and salve for itch and impetigo.

The second area includes a cot fully equipped for pupils who are ill and need to lie down. At times an extra cot has been needed. From past experience the following supplies have been found necessary and these were purchased: a good mattress, two pillows, four pillow slips, four sheets and two blankets.

The third area includes study desk, chairs and settee for pupils who are well enough to study but who need to be separated from other pupils for observation. To the equipment previously listed, scales, bulletin board and lockers were added.

White was selected for the first aid cabinet, mirror, cot, lockers and scales; the furniture was painted green. White curtains with a green design were made for the windows.

The health room serves as a center for many of the health activities of the school. Here the weight and height of all pupils are taken and recorded periodically on charts posted on the bulletin board in the room. The room also is used by the health department for its preschool clinic each year.

In case of injury or sickness, the room is a splendid place to take the pupil for examination. If the injury is minor, the child can be treated and sent back to his room. In case of a more serious injury, the pupil can rest until a physician is summoned or arrangements can be made to send him home.

A suspicious case of contagious disease is sent to the health room for isolation from other pupils until opportunity presents itself to have the child examined or taken home. Many pupils reaching school with a slight headache or an upset stomach have been allowed to rest for a time. Frequently the difficulty disappears and the child is able to return to his school work for the remainder of the day.

Experience during the years of its operation has crystallized our belief into a firm conviction that every school needs a health room, as it provides a clean, pleasant place to send pupils (1) for observation after the morning health inspection, (2) for treatment of injuries on the playground, (3) for segregation of those with symptoms of contagious diseases, (4) for physical examinations, and (5) for monthly measurements of height and weight. It also provides a room that is adequately equipped and available at all times to all pupils and to the teachers. Such a room tends to raise the health standards of school and community.

Insurance Rates in One State

STOCK insurance companies have recently reduced the premiums for fire insurance on certain classes of public buildings in New Mexico. In the opinion of state schoolmen, the reductions came as a result of discoveries made by Irvin P. Murphy, member of the executive committee of the New Mexico Educational Association, who has shown that the loss ratio on all forms of public property in New Mexico is 21.84 per cent over a period of twelve years.

"Since only 5 per cent of the public property in New Mexico comes within the class that is eligible for reduced rates recently made effective, the value of the reduction," Mr. Murphy asserts, "is practically worthless and seems to be nothing more than a gesture to prevent the growing sentiment toward better state regulation of rates."

Twenty-eight state institutions in New Mexico paid approximately $309,000 for property insurance premiums between 1926 and 1934, inclusive, and received only $89,000 in loss payments, with a resultant loss ratio of 28.84 per cent.

The 31 counties and 59 incorporated municipalities experienced loss ratios of 11.63 per cent and 2.91 per cent, respectively, from 1926 to 1934, inclusive.

Experience in the public schools of New Mexico approaches the average for all public property in the state with a loss ratio of 22.32 per cent from 1923 to 1934, inclusive, as compared with 21.84 for all public property.

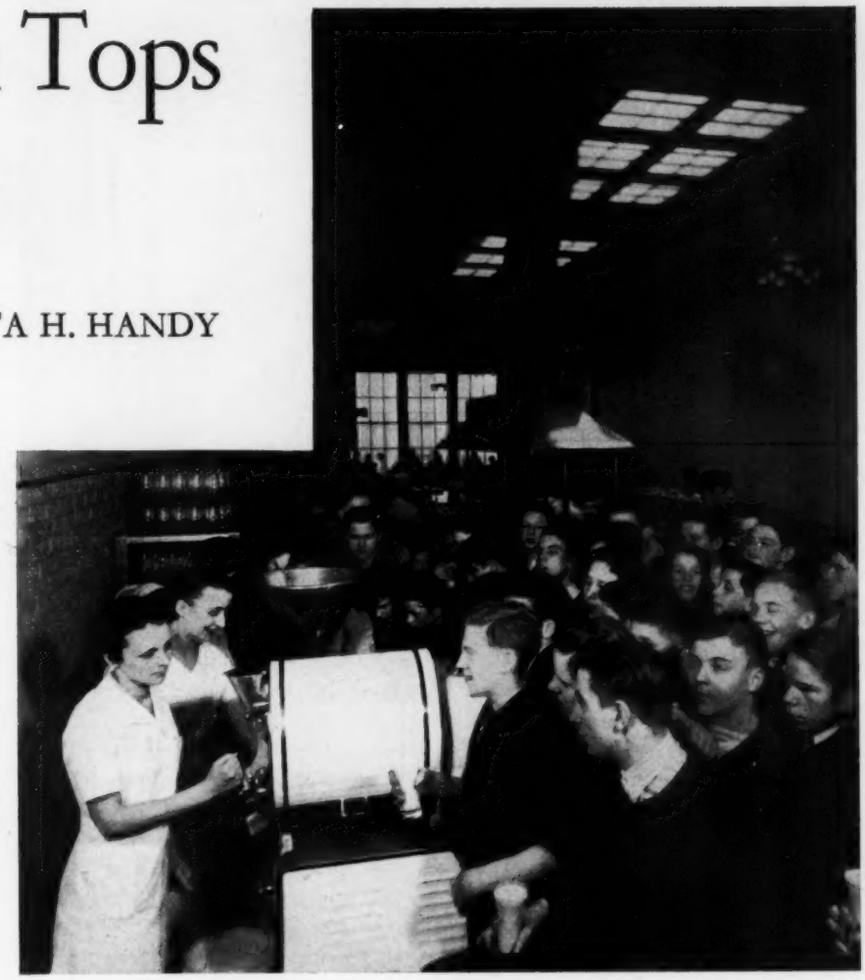
The general belief that schools suffer a greater loss than any other form of public property cannot be justified upon the basis of experience in New Mexico for the period included in the study. The ratio on public school property has been less than 1 per cent more than public property as a whole, and school property has paid 61.25 per cent of the premium expenditure for all public property.

On the basis of the data presented it is reasonable to conclude that the premiums on public property insurance in New Mexico have been too high. According to national standards, 52 per cent of the premium dollar should be allowed for losses; 3 per cent for conflagrations; 42.5 per cent for expenses, such as salaries, commissions, rents and taxes, and 2.5 per cent for profits.

On the basis of these percentages, more than twice as much of the premium dollar paid for insurance on public property in New Mexico is being allowed for losses than is necessary to pay these losses, because only 21.84 per cent of the premium dollar actually is returned to the insured. It seems possible, therefore, to make a saving of 27.66 per cent of the premium now being paid. Based on public property from 1927 to 1933, a part of the period covered by the Murphy study, this would amount to a total saving of $245,267.41.

Ice Cream Tops Them All

ETTA H. HANDY



A counter ice cream freezer in use at Lane Technical High School, Chicago. The end that is near the camera is a dispenser for frosted malted milks, which are evidently much in demand in this boys' public school.

FROZEN products, such as ice cream, malted milks and sundaes, are popular foods for the school lunch. They are important also from the standpoint of nourishment, supplying protein requirements, valuable mineral elements and vitamins.

In addition to the plain ice cream, vanilla, chocolate or strawberry, and other ice creams or sundae combinations commonly served on the cafeteria counter, there are sherbets which introduce pure fruit juices, such as lemon, orange or pineapple combined with a proportion of ice cream in the freezing process. Likewise, variations of malted milk, including ice cream in the mixture, are popular among school children. The semifrozen products developed in the last few years have appealed especially to children. They provide another means of supplying important food values in appetizing ways.

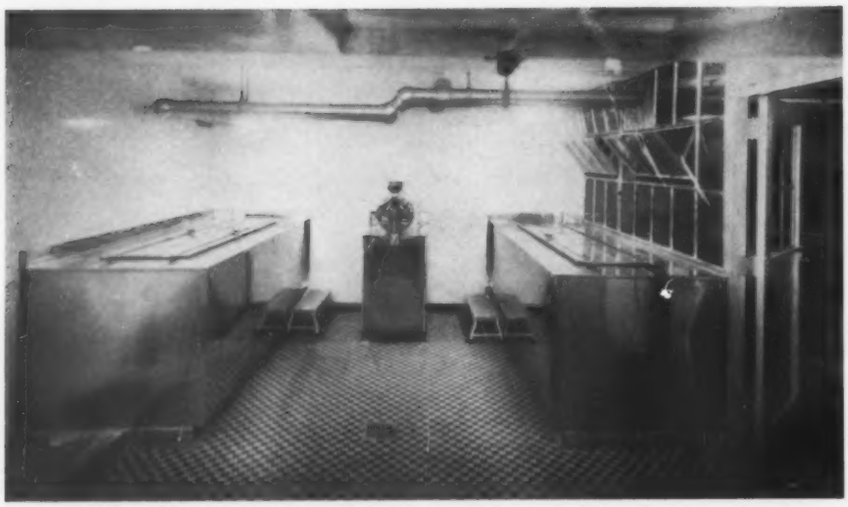
Recent medical research in the field of nutrition has emphasized the importance of utilizing frozen products as a favored means of introducing milk, cream, fresh fruits and fruit juices into the diet. A frequent serving of frozen or semifrozen products is one of the simplest ways of supplying milk to children who may not care for it or who would not drink it in its natural form. Ice cream supplies a combination of carbohydrates, fats, proteins, mineral salts and vitamins and is a palatable and easily digested food. Its food values are of high quality.

The value of frozen and semifrozen ice creams, sherbets, malts or similar food items has led managers of school cafeterias to study the methods by which these foods can be supplied to school children safely, conveniently and economically. In any city or town of fair size there are one or more manufacturers of commercial ice creams who will deliver the standard varieties of ice cream of uniform high quality on short notice. These manufacturers have the machinery, the sanitary surroundings and the means of testing formulas and output to produce excellent ice cream. Purchasing ice cream from reliable firms eliminates certain risks and assures a dependable product for resale.

Such purchasing is frequently the best solution for many school cafeterias. In others, it has been found advantageous either to produce all frozen products within the cafeteria or to buy a part of the daily requirements in the standard forms (vanilla, chocolate and strawberry) and to make some special ice creams or sherbets and the semifrozen forms in a freezer designed especially for this purpose and installed in the school.

Ice cream or ice cream mix is usually purchased commercially in terms of butterfat content, as for example, 10 per cent, 12 per cent, 14 per cent or higher. Most states regulate the amount of butterfat in commercial ice cream. It varies from 7 to 14 per cent by law. It also may be purchased with a butterfat content as high as 16 to 20 per cent, although rich ice cream is rarely used in any school service. Some state regulations require a definite weight per gallon in commercial ice cream.

In purchasing ice cream or ice cream mix for the cafeteria the butterfat content is commonly stated. A 10 per cent butterfat ice cream compares closely with the proportion of whole milk in nutritive value and a 14 per cent cream is similar to a 20 per cent table cream in food value. In most public schools a 10 or 12



A cafeteria manager interested in ice cream equipment may well obtain a proposed layout and estimate of costs from several reliable manufacturers.

per cent butterfat ice cream is the most popular and commercial ice cream or ice cream mix is ordered on that basis. A higher butterfat content may be specified for special occasions or to meet unusual demands. A 12 per cent or 14 per cent butterfat content is popular with older pupils or adults.

It should be emphasized that the manufacture of ice cream within the school cafeteria department has not developed through any dissatisfaction with commercial ice cream. The problem within the school cafeteria is rather a matter of supplying comparatively small quantities of several types of frozen products. Many of the formulas especially suited to the school cafeteria would not be practical for a commercial plant to undertake and the cafeteria manager must produce these items within the department.

Examples are the fresh frozen ice creams that are made from formulas similar in composition to whole milk of 20 per cent cream; frosted malteds served direct from the freezer; sherbets made from fresh pineapple, orange or lemon juice, combined with a proportion of ice cream in the mix, and other mixtures made from formulas especially adapted to the nutritional needs of a particular group of school children. Other types of fruit ice creams and the so-called "health ice creams," made from figs or prunes, are popular and may be made in small quantities for variety. Chocolate ice creams are always a favorite. Combinations with malted milk, milk chocolate or nuts may be used to add interest to the menu and provide important nutritive values.

Each manager or director of a school cafeteria may determine the advantages to be derived from making ice cream according to the specific need. Ice cream mix and ice cream in any form require the same scrupulous care in handling as any other milk product in order to keep the bacterial content low. Other supplies used in the processes of making ice creams or sherbets, such as fruits and flavorings, must be fresh and stored in refrigerators. Careful planning is necessary to fulfill the sanitary requirements of the room in which the ice cream is made and for the thorough cleaning of the equipment. Refrigeration must be adequate and planned for the right capacity and economical operation.

The equipment required for producing ice cream for a school cafeteria is reasonable in cost in proportion to the volume of food it will produce and its depreciation over a period of several years. A cafeteria manager interested in ice cream equipment may obtain a layout and estimate of costs from several reliable manufacturers and compare the plans submitted. The engineering departments of these firms will analyze the individual needs presented and make suitable recommendations. At present most manufacturers prefer to quote equipment completely installed with its refrigeration unit.

Mechanical improvements in ice cream freezers, hardening and storage cabinets and refrigerators have simplified layouts and aided the standardization of processes of operation. The direct expansion type of equipment for both freezing and hardening the ice cream has been found most satisfactory in general use, with the compressor housed within the equipment, at a convenient point in the same room or even in a more remote point.

The type of ice cream to be made determines the choice of freezer required. Freezers are of the batch or counter models. In school systems requiring a larger quantity of ice cream the batch freezer is frequently selected. In cafeterias in which there is demand for small quantities or a greater variety of kinds of frozen products or in which space is limited, the counter freezer has proved satisfactory. The counter freezer also provides a substitute for the battery of malted milk mixers formerly used on the serving counter.

In selecting both the hardening cabinet and the freezer it is important to keep the equipment flexible in order to handle various forms of frozen desserts to the best advantage. On this point the advice of the manufacturers is especially helpful. As in some other items of equipment and furnishings the reputation of the manufacturer is an assurance of the quality of the equipment.

These new developments in equipment, together with recent research in nutrition, have made it possible for the cafeteria manager to meet more fully the increased demand on the part of the public for a variety of frozen products.

Multiple Choice Menus

Institution of a multiple choice menu at the men's cafeteria, University of South Carolina, has set business to booming this year. Instead of paying a flat rate for all meals, the students now pay only for what they actually eat, selecting their meals from three meats, four vegetables, soup, three salads and three desserts. Meals missed during holidays or week ends are not charged against them. The multiple choice menu will be introduced shortly at the women's cafeteria.

Cafeteria Trains Youth

NEOSHO
FREDENBURG

IF YOU are a conscientious little bus boy you may grow up to be a manager, or better still, the owner of a restaurant or hotel. This may resemble the presidential story, but it does have much to its credit, for the climb from bus boy to owner scales the entire ladder of success in the restaurant or hotel business. The times it has been accomplished are legion. The apprentice idea in the trade has endured for centuries. The industry is one of the last in our commercial development to welcome the idea of having its employes trained outside the home shop.

Until our home economics courses began to look at food from a scientific angle, cooking was considered an art only to be learned from a master craftsman. Chefs jealously guarded their recipes. Years were required to gain the proper touch, the ability to season and gauge temperatures correctly. There were many pitfalls for the novice, pitfalls that our standardized recipes and modern machinery have eliminated.

Hospitality always has been the duty of the owner, but with the development of industrial centers came the feeding of masses of people in short periods of time. This art, too, has become commercialized. Now every waitress, in addition to the hostesses and managers, must have a part in dispensing hospitality. She must conform to a certain pattern; not the old-time easy friendliness or extreme formality toward the customer, but a thoughtful, courteous, impersonal efficiency.

Above: Kitchen in the Topeka High School cafeteria, where under careful supervision, the pupils first serve as apprentices.

Below: The waitress training group at Topeka High School cafeteria takes complete care of the service at the faculty counter.

It is possible to teach all occupations when they become patterns and are restricted in skill. A large restaurant offers many opportunities for youth. The chef is head of food preparation in the kitchen. The baker reigns in the pastry and bread department. The salad woman has her own niche where she supervises the preparation of salads, sandwiches and appetizers. The little sandwich girl may aspire to be head salad girl and the fry cook to take the chef's place. The bus boy has his eye on the manager's job, but first he must serve as a waiter, headwaiter, possibly cashier, then assistant manager. The waitress looks forward to being a hostess, perhaps assistant manager and eventually to having a little shop of her own.

With our depressions and recessions many high schools are becom-

ing acutely aware that a large percentage of the graduates is unable to get jobs. Many of these boys and girls will have no further educational opportunities to prepare them for earning a living. Gradually even our most conservative high schools are looking toward trade and vocational education.

In the fall of 1936 an experimental course in commercial foods was started in the Topeka High School cafeteria, Topeka, Kan., with aid from the state vocational education department. The instructor in charge is a major in home economics and holds the master of science degree in dietetics. One half of her salary is paid from the cafeteria fund and the other half, from the state vocational education department. She is in direct charge of the faculty dining room and uses it as a laboratory for pupils in counter service and waitress training. In addition, she supervises pupil apprentices in the kitchen.

The class is open to girls between the ages of 16 and 25 years. There are some high school pupils whose laboratory experience is restricted to two hours and also a group of National Youth Administration girls whose time is divided into a four hour laboratory period every other day. This group is organized as a project under the National Youth Administration; the girls receive pay for the time they serve and are expected to become self-supporting and independent of aid at the close of their training.

The out-of-school girl has an advantage in the longer laboratory period as the completion of a piece of work is possible in this length of time. Shifting her to the different production periods of the day is also possible and gives her a more complete picture of the entire plant.

The most desirable girl for waitress training is the girl who has had some home economics training and who has not been out of school too long. She need not necessarily be a high school graduate. However, the high school graduate has a much better chance for future advancement.

Girls entering the class are given personal supervision and instruction. They serve at first on the various kitchen stations. If they find this work agreeable and if they have a personality unsuitable for waitress training they are encouraged to become range, pastry or salad workers. If they decide to stay in the kitchen they are apprenticed to the station in which they are most interested. Here they actually prepare the food, keep a file of recipes, learn to organize their work and become acquainted with the various pieces of equipment. They are taught to be clean and neat. Kitchen stations demand more training time before the girl is capable of apprenticing in downtown restaurants. She is first tried out as an assistant and, if she proves capable, then she is given a chance at the head position.

The waitress training group is placed in charge of the faculty counter. Here they receive training in setting up and cleaning stations, cutting and dishing pastries, serving dinner plates with standardized portions and making coffee. During this time special instruction is given in cleanliness of body and dress and general attractiveness. They are taught courtesy and to cultivate a memory for names. They have some training in good food combinations. As the girls develop poise and confidence they are given special instruction in table setting and proper table service. They practice taking orders, calling orders and making change.

When they become proficient they are sent to a downtown restaurant to serve an apprenticeship. Here, working under pressure, they overcome crowd fear and develop speed. At the end of this period they usually are employed by the restaurant in which they have served their apprenticeship. The girls are not forced through this training in a limited time, neither is a definite apprenticeship demanded, but an effort is made to place them in permanent employment as soon as they are found to be capable of holding a job.

We have had excellent cooperation from restaurant managers in our community. The ultimate success of the venture depends on their interest and willingness to support this program. We have made a good start.

FOOD FOR THOUGHT

Where Food Costs Are High

• Evanston, Ill., which is so near metropolitan Chicago that its food and labor costs are greater than those of smaller town school cafeterias, has a special problem of keeping food costs low in its high school cafeteria. No appropriation is given for the cafeteria's support by the board of education and it is entirely a self-supporting enterprise.

To give the pupil with a limited lunch allowance a satisfactory meal, the cafeteria offers daily a 15 cent special. This consists of a meat or meat substitute, a fruit or vegetable, graham bread and butter and a bottle of milk. Typical meat dishes are meat balls, hash, chop suey and fish. A menu consisting of vegetable soup, sandwich, milk and dessert is served once each week.

Food Technology

• The University of Minnesota will conduct research in the field of food technology under the Hormel Research Foundation supported by an annual grant of $25,000 from George A. Hormel & Company, packers of Austin, Minn.

Any process of industrial value developed by the foundation's research workers will be patented by the University of Minnesota with proceeds to be divided equally between the university and the foundation.

Follow Nursery School Pattern

• A self-styled convert to the teaching of nutrition after the pattern of the nursery school is Josephine N. Adams, assistant director of homemaking and school lunches, New York City, who spoke on the program of the National School Cafeteria Association.

Miss Adams pointed out that there is nothing in the nursery school curriculum that should not be imitated by the elementary and secondary schools. One principle of the nursery school is that a child should be relaxed before going to his meal. Another is that the children eat slowly and that conversation be conducted in low tones.

Educating school children to nutritious food in order that the mind may function properly was the challenge Miss Adams presented cafeteria directors above the commercial considerations involved.

"I say it is educational," Miss Adams emphasized, "that the child be in a relaxed condition before he goes into the cafeteria, that he have handwashing facilities and sterile towels close at hand, that ceilings be soundproofed and that everything in the cafeteria be so attuned that relaxation is possible."

Schoolhouse Construction Council Argues on Lighting, Planning and Reorganization

Discussion of the moot problem of schoolhouse lighting, functional planning and problems of structural reorganization of school districts featured the sixteenth annual meeting of the National Council on Schoolhouse Construction held at Frankfort, Ky., November 14 to 17.

Much interest was aroused in the vigorous attack by R. H. F. Halsey, formerly of the New York City schools, upon the heavy increases in artificial lighting recommended in 1938 by the Illuminating Engineering Society. It was his contention that the adoption of these increased lighting standards would cost the schools of the United States almost $31,000,000 for installations and $22,250,000 for additional current, or a total of $53,250,000 during the first year and $22,250,000 per year thereafter from operation.

Mr. Halsey also contended that these recommended standards had no basis in actual research and recommended extensive experimentation by competent authorities before the new standards were accepted.

Dr. W. K. Wilson of the New York State Department of Education presented the results of careful experimentation by Dr. W. W. Coxe over a year and one-half in schoolroom lighting with 12 and 25 foot candle intensities as affecting learning. His results indicated no appreciable difference in the rate of learning resulting from increased lighting, indicating that artificial light is only one of the many factors involved. The cost for the 25 foot candle room was more than 200 per cent higher than for the 12 foot candle room. Since this is the first valid experimentation carried on in this area, the results are significant.

H. W. Schmidt, Wisconsin State Department of Education, discussed the proposed experiments of the National Plant Research Council to determine the effect of natural and artificial light under controlled conditions. Charles Burch, California State Department, presented interesting studies of provision for and control of natural lighting in California classrooms.

Alice Barrows, U. S. Office of Education, told the need for designing the school auditorium specifically as a theater instead of vaguely and traditionally as an assembly hall. She depreciated the use of the "gymtorium" as a hybrid that was neither a good gymnasium nor even a fair auditorium. Harold E. Moore, Indiana University, reported on desirable types of windows for school buildings.

H. F. Alves, U. S. Office of Education; Dr. T. C. Holy, Ohio State University, and W. F. Credle, North Carolina, spent an afternoon discussing the implications of federal studies of school districts on the problems of structural reorganization. This most important problem is being given serious consideration by the council. Raymond V. Long, Virginia, discussed long range planning of school buildings in cooperation with the U. S. Office of Education.

Fred Horn, Texas, presented some interesting considerations on the functional planning of school buildings, while Don C. Rogers and Thomas J. Higgins gave an illustrated talk on the new Chicago Trade School, one of the largest secondary school buildings in the United States.

I. O. Friswold, Minnesota State Department of Public Instruction, offered some excellent suggestions for locker and shower facilities for physical education.

Much attention was given to the enlargement and revision of school building standards under the chairmanship of H. W. Schmidt.

The council on school construction adopted new site standards, recommending a range of from 5 to 10 acres for elementary schools and from 10 to 30 acres for high schools, depending upon size and community land use conditions.

The council also adopted a recommendation providing for parking space on school sites to eliminate the hazards to life now caused by indiscriminate parking on all sides of the grounds.

New officers were chosen for the 1939 meeting, which will be held in New York, next November 13 to 16: president, Arthur B. Moehlman, University of Michigan and editor of The NATION'S SCHOOLS; vice president, John W. Brooker, director of school buildings and grounds, Kentucky; executive committee, Thomas J. Higgins, Chicago, three year term; J. L. Graham, Florida, two year term, and G. E. Irons, Cleveland, one year term. Ray L. Hamon of George Peabody College was again reelected secretary-treasurer.

Food Service Directors' Meeting Assumes National Importance at Fourth Conference

FROM a modest start, the annual Conference of Food Service Directors has assumed nation-wide importance. Only four years ago, a group of eastern school cafeteria managers, led by Mae D. Paige, West Hartford, Conn., and Mary C. Kelly, Hartford, Conn., assembled to discuss mutual problems and to consider ways by which school feeding might be tied in more directly with the educational program. Conceived originally as an unofficial gathering, with each year it has gained fresh impetus. The final result, as evidenced in the two day meeting held the first of the month at Rochester, N. Y., can leave no doubt as to the success of the project.

Approximately 400 women from various sections of the country, some from as far as the Middle West, gathered to hear programs carefully arranged for discussions on various phases of modern nutrition as affecting the school child. This year, too, for the first time, an attractive array of exhibits was staged, thus lending additional significance to the proceedings.

Rested from trips through Rochester schools and refreshed by appetizing luncheons in the various cafeterias, a large audience was on hand at the opening session to hear Grace Helene Miller, general chairman, introduce the speakers and the members of the executive committee: Constance C. Hart, director of school lunchrooms, Rochester, N. Y.; Mary deGarmo Bryan, Teachers College, Columbia University, New York; Mary L. McGowan, Girls' Commercial High School, Brooklyn, N. Y.; Daisy B. Treen, Women's Industrial Union, Boston, and Miss Paige and Miss Kelly.

There is need for the school cafeteria manager having accurate knowledge of equipment details. Saul Blickman, Weehawken, N. J., emphasized this point in discussing fabricated food serv-

(*Continued on age* 68)

NEWS IN REVIEW

Dayton's Schools Reopen

The schools of Dayton, Ohio, closed October 28 because of the lack of operating funds, reopened November 21 when more than $430,000 was made available for operation of the schools from four sources.

The state made two contributions, $32,483 for reimbursement for local teaching of handicapped children and $247,745 from the state school foundation. Money coming from local sources was $38,000 from real estate tax distribution and $112,000 from tangible personal property tax.

While 34,000 children played on the streets of Dayton for almost a month, the city authorities had been trying to remedy the dilemma in which they found themselves as the result of a $17,000,000 deficit in the state school foundation fund that left localities without state funds for education. The only solution other Ohio cities had found was a special tax levy for schools. This Dayton voters had rejected six times.

At the November election Dayton voters rejected for the seventh time a 2 mill special levy for schools. This leaves Dayton school authorities still searching for a source of money for operation of the schools next year.

INSTRUCTION

Traveling Speech Clinic

For the next two years Indiana University will offer its services to Indiana school children who suffer from speech and hearing defects through a traveling clinic, staffed by four full-time members.

The two year program is being financed by a $10,000 grant from Psi Iota Xi, national service sorority. A supplemental grant was made by the university's extension division.

The program will be inaugurated through centers that will be established in 13 Indiana cities. The clinic will spend at least a week in each center and will be able to examine between 10 and 15 defective children a day for speaking. Between 200 and 600 children may be examined each day for hearing.

The examination work will in no way be a medical examination for ear defects, according to Dr. Robert Milisen, director of the university speech clinic, but the examinations are designed to see how many children have ear defects and how bad the defects are. Parents will be urged to procure medical examination for their children after these examinations.

Doctor Milisen estimates that 1 per cent of Indiana's school children are afflicted with stuttering, 3 per cent have articulation defects and 1.5 per cent suffer from defective hearing.

ADMINISTRATION

Giving All the Facts

Selling the idea of central school organization to the people is merely the process of telling the facts truthfully and explaining the advantages, Guy W. Cheney, a member of the board of education at Corning, N. Y., told 1500 members of the New York State School Boards Association meeting recently in Syracuse.

"There are no real arguments against centralization except the increase in taxes. Do not say there will be no increase in taxes because the most important rule of all is to tell the truth. Tell it even when it hurts. Telling the truth about centralization means more than being truthful in what you tell. It means giving all the facts."

Mr. Cheney said that in the short space of three years, the number of centralizations in New York State has doubled. The districts are larger and their tax base much greater. Many areas, formerly with no centralization, now have several districts operating with a degree of success beyond any promises made. As a result, the attitude of rural folk has changed in corresponding degree with their familiarity with centralization.

Private School Enrollment Up

For the second consecutive year enrollment in private schools throughout the country is on the increase and a more prosperous situation in that class of educational institutions is indicated than in any year since 1929, according to a census made by a national advertising agency.

The greatest increase is in the junior colleges, which are 13 per cent above 1937, as compared with an average increase for all private schools of 3.9 per cent. Enrollment in military schools, with a decrease of 0.9 per cent under 1937, shows a decline for the first time in six years.

Results of the census show that about 33 per cent of the private schools are filled to capacity. Increases in the attendance-capacity ratio are shown by 65 per cent of the schools. Greatest change was found in the Midde West, where 38 per cent of the schools have 90 per cent of capacity, as compared with 29 per cent in 1937.

High School Personnel Service

A free employment service recently was established by Cohoes High School, Cohoes, N. Y., according to Charles E. Wheeler, principal. A number of recent graduates have already registered with the new service. They include mostly those who have specialized in various fields, such as accounting, secretarial practice, retail selling, machine shop, wood shop, home economics and household management. Some want full-time work and others wish to work after school and on Saturdays.

Town Meeting Talks

Community activities of the faculty of George Washington High School, Indianapolis, have taken the form of "Town Meeting Talks" sponsored, planned and produced by the faculty. Similar programs are being presented again this year because of the success of the programs presented on alternate Tuesday evenings in the high school last year.

Typical programs included book reviews by members of the English department faculty, a music program by an orchestra teacher and the head of the music department, a lecture on social science, a chemistry lecture and demonstration and an illustrated astronomy lecture.

Publicity was given by three city daily papers and by three neighborhood weekly newspapers. Pupils were asked to explain the series at home.

Coming Meetings

Nov. 30-Dec. 3—American Vocational Association, St. Louis.

Dec. 1-3—Arizona Education Association, Phoenix.

Dec. 2-3—New England Association of Colleges and Secondary Schools, Hotel Statler, Boston.

Dec. 5-6—National Association of School Board Members, first annual meeting, Hotel Morrison, Chicago.

Dec. 27-29—Ohio Education Association, Columbus.

Dec. 27-29—Pennsylvania State Education Association, Harrisburg.

Dec. 28-30—Illinois Education Association, Springfield.

Dec. 28-30—Oregon State Teachers Association, Portland.

Feb. 25-March 2—American Association of School Administrators, Cleveland.

March 23-25—Georgia Education Association, Atlanta.

April 10-14—Association for Childhood Education, Atlanta, Ga.

July 2-6—National Education Association, San Francisco.

Busy

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Patrons attending the last meeting were given an opportunity to express their interest in continuing the lectures for the following year and to mention subjects which they desired.

MEETINGS

Unusual Conference

A street car motorman, a printer, a house painter, an elevator operator and a garment worker were among the speakers at an educational conference which attracted hundreds of school officials to the campus of Northwestern November 18 and 19. The conference, sponsored jointly by the school of education of Northwestern University and a local branch of the Progressive Education Association, discussed ten phases of the relations of school and community, on the first day from the standpoint of the community and on the next day from the viewpoint of educators.

Teachers of Mathematics

The National Council of Teachers of Mathematics will hold its fifth December meeting with the American Association for the Advancement of Science, December 29 and 30, at Williamsburg, Va. There will be three section meetings for arithmetic, secondary mathematics and teacher training, all to be held on December 30.

BUILDINGS

Goucher College Competition

Moore and Hutchins of New York were the winners of first place in the Goucher College architectural contest, it was announced at the fiftieth anniversary celebration of the college recently in Baltimore. Second prize winners were Eliel and Ero Saarinen, Bloomfield Hills, Mich.; third prize winner, Frederick G. Frost, New York, and fourth prize winner, Thompson, Holmes and Converse, Inc., New York. The campus of Goucher is to be moved to a new site near Baltimore.

"Pin Money" Builds School

In 1928 Dr. Elwood Patterson Cubberley, professor of education at Stanford University, gave President Ray Lyman Wilbur $5000 in securities saying: "My wife and I want this gift kept a secret, but we will turn over all our pin money to the university. It's for a new education building."

Each year for four years Doctor Cubberley brought President Wilbur another $5000 and, when he retired in 1933, he came again, bringing a bundle of securities worth $400,000. The recovery upswing increased the securities' value $75,000 and interest brought the total to $535,000. The pin money paid for a new three story school of education building that was presented to the institution during November.

The sum came from royalties on books, receipts from lectures and consultation services, dividends and interest.

N. Y. A. Grant for Construction

West High School at Salt Lake City, Utah, has been allotted $14,057 for construction and remodeling under an N.Y.A. grant. The project includes remodeling and construction of storage and display cabinets, construction of work benches for mechanic arts shops, installation of new lighting units and a variety of other work that will furnish employment to 40 youths. The Salt Lake City board of education will furnish $3500 of the cost; the N.Y.A., $10,557.

RADIO

International Broadcasting

The assignment to N.B.C. of two new short-wave frequencies by the Federal Communications Commission will provide for a comprehensive schedule of short-wave broadcasts to Latin American countries. The assignment of the new frequencies, which were made available for international broadcasting by the Cairo radio conference early this year, follows the rapid increase in the popularity of American programs with foreign listeners, who have written N.B.C. that American news reports provide a most trustworthy source of information, since European news distribution is generally subject to government control.

"How to Use Radio"

In his inaugural address as president of the National Association of Broadcasters, Neville Miller promised that the broadcasters of America would place in the hands of the teachers a manual of radio instruction that would enable the most remotely situated teacher to prepare and present educational matter over the air in a more effective fashion.

That promise recently has been fulfilled in the manual, "How to Use Radio," prepared by Prof. Kenneth L. Bartlett of Syracuse University, widely known in educational circles as one of the most skilled and practical of the "educational broadcasters."

More than 400 radio stations in the country that are members of the National Association of Broadcasters have

distributed this manual to teachers in city and county schools.

Dr. John W. Studebaker, U. S. commissioner of education, has written a foreword.

Pittsburgh Extends Broadcasts

Pittsburgh public schools have launched the second year of direct line broadcasts from auditoriums of the city high schools to their outlet radio station WWSW. This year the program has been extended and increased to include representative work of the junior high schools and elementary schools. Nearly 100 broadcasts of musical programs will be presented, together with a weekly dramatic program, based on materials furnished by the U. S. Department of Interior.

Short-Wave Broadcasts

Harvard University educators during December will complete a series of five lectures that are being broadcast by short-wave radio on subjects of interest to parents and teachers. The final lectures will be heard on the first and second Tuesdays in December at 8 p.m. (E.S.T.) over short-wave station WIXAL, Boston, (6.04 megacycles). On December 6, Dr. Payson Smith will discuss "Critical Issues in Public School Administration" and on December 13, Prof. Frederick G. Nichols will speak on his "Twenty Years' Experience With a National System of Vocational Training."

Open $5000 Radio Workshop

Development of radio at Syracuse University has paralleled its growth in the commercial field during the ten years the university has been broadcasting.

Recently Syracuse opened a new $5000 radio workshop in its library building, consisting of six rooms, resembling in detail a modern broadcasting station, which includes a large studio, a small studio, the control room, an observation room for classes or spectators, a reception room and an office for the director.

The workshop was built through the three-way cooperation of the university and the city's two commercial stations.

Foreign Broadcasts

A new departure in educational broadcasting is the four short-wave programs broadcast weekly from the General Electric Company's two short-wave stations at Schenectady, N. Y., to give listeners in foreign countries a better understanding of the American school system.

Working with the company's staff in directing the educational broadcasts are Dr. Frank P. Graves, New York State commissioner of education, and W. Howard Pillsbury, superintendent of Schenectady schools.

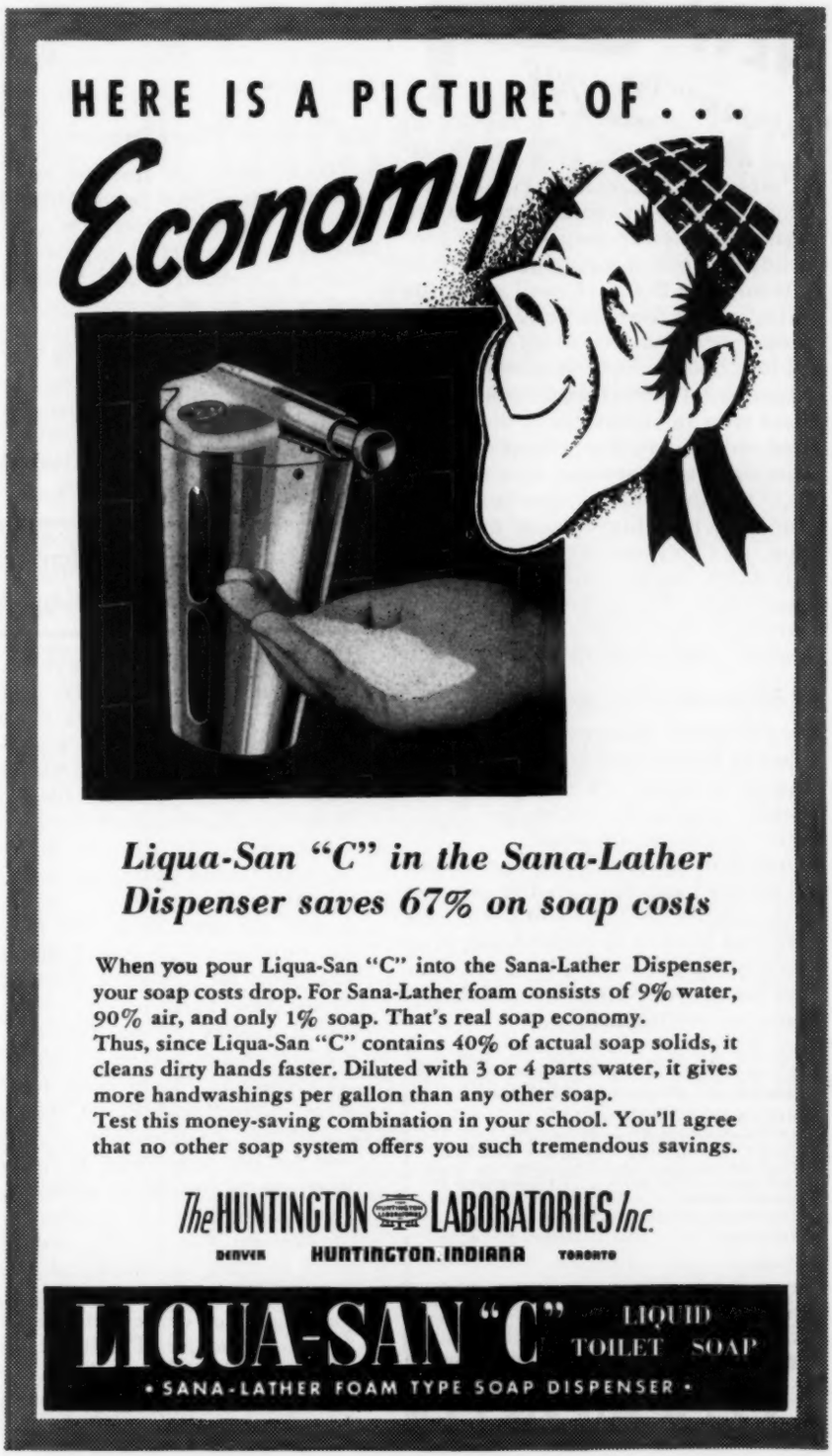
The programs are being directed at South America and Europe by use of directive antennas. The four programs are broadcast as follows: Monday, 4:15 p.m.; Tuesday, 2 p.m.; Wednesday, 2 p.m., and Friday, 4:15 p.m. over both stations W2XAD and W2XAF. The programs are then to be repeated in Spanish and Portuguese in the evening for reception in South America.

VISUAL EDUCATION

Production of Copper

Four new educational films telling the story of the production of copper are the latest additions to the film library of the U. S. Bureau of Mines Experiment Station, 4800 Forbes Street, Pittsburgh. Copies of these films, all of which are silent, are available in either 16 or 35 mm. sizes.

"Copper Mining in Arizona" is the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title of a film of three reels, illustrating methods employed in starting open pit mining at Morenci; a one reel film is entitled "Copper Leaching and Concentration," illustrated by scenes covering solution of copper from the rock, the collection of copper-sulphate underground and the precipitation of the copper in tanks containing scrap iron.

Another one reel film bears the title, "Copper Smelting," and shows the conversion of copper ore and concentrates into metallic copper. "Copper Refining" shows conversion into chemically pure copper of the anode slabs made in the smelter.

Two silent films of two reels each are entitled, "Aluminum, From Mine to Metal" and "Aluminum: Fabrication Processes."

Aid Scottish Film Libraries

The British Film Institute will receive a grant of 5000 pounds from the Carnegie trustees to meet the cost of setting up a central film library in Scotland. Scotland is said to be foremost in Britain to develop the use of the film for educational purposes; 20 per cent of the total number of projectors in Great Britain are in use there. The supply of films is the most difficult problem. In some large towns film libraries have been established, but other areas still find difficulty in satisfying the demands of their teachers. The solution is thought to be in the establishment of regional film libraries. The experimental Scottish library will cover all Scotland and will supplement the resources of those areas with film libraries and assist those that have none. The grant will be spread over a three year period.

Library Orientation Film

A library orientation film has been produced by Ethel Walker, librarian, Mackenzie High School, Detroit, and members of her staff. The film was shown recently to incoming 9B and 10B pupils of the school. The purpose of the film is to acquaint new pupils with the library and to teach them the proper methods of using it.

TRANSPORTATION

Grade Oklahoma Vehicles

Of 65 school buses in Washita County, Oklahoma, the Oklahoma Patrol graded 36 as satisfactory, 16 as fair and 13 as too dangerous to be operated. In Tulsa County, 43 buses out of 54 were graded fair; 7, satisfactory, and 4, dangerous. Grady County with 50 satisfactory buses out of 72 leads the state in grade A vehicles.

Films for the School Screen

American History—4. Expedition to the West (West of Mississippi)

Growth of the United States—Animated maps and motion picture study of the growth of the country by western expansion. 2 reels. 16 mm., silent. For rent or for purchase. Edited Pictures System, Inc., 330 West Forty-Second Street, New York.

Oregon Trail—The story of the missionary, Marcus Whitman, and the settlement of the Oregon territory. 5 reels. 35 mm., silent. For rent or for purchase. Films of Commerce Company, Inc., 21 West Forty-Sixth Street, New York.

Trans-Mississippi Trails—Growth of pioneer immigration and occupation in the central plains after Indians were subdued and Erie Canal was completed; establishment of farms and ranches as far west as Rockies; geographical location of routes, agricultural demands and political lines of Missouri Compromise; animated maps showing settlement and annexation of Texas, Mexican War campaign, addition of New Mexico, California and Gadsden Purchase. 1 reel. 16 mm., silent. For rent or for purchase. Society for Visual Education, Inc., Dept. M.P.W., 327 South La Salle Street, Chicago, or Visual Education Service, 131 Clarendon Street, Boston.

Overland to California—Early routes to the West, following trails first made by animals, are shown to have been succeeded in turn by covered wagon trains the pony express, traders, railroads and airplanes. 1 reel. 16 mm., silent. For purchase. Eastman Kodak Company, Teaching Films Division, Rochester, N. Y.

Across the Rockies to the Pacific—Final step in the coast-to-coast progress of the United States' sovereignty. 1 reel. 16 and 35 mm., silent. For rent or for purchase. Society for Visual Education, Inc., 327 South La Salle Street, Chicago.

Custer's Last Fight—Picturing his final encounter with the Indians on the western frontier in 1876. 4 reels. 16 mm., silent. For rent or for purchase. Edited Pictures System, Inc., 330 West Forty-Second Street, New York.

Days of '49—Founding of Sacramento, Calif.; gold rush. 1 reel. 35 mm., silent. For rent or for purchase. Wholesome Films Service, Inc., 48 Melrose Street, Boston.

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SUDETEN has long been a standard word in the gazetteers of German dictionaries. The WINSTON SIMPLIFIED DICTIONARIES (Advanced and Encyclopedic Editions) were the first popular-size American books to define it, along with many other new words added in printings this summer. The WINSTON SIMPLIFIED again demonstrates the aptness of its subtitle—"The Modern Authority."

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On the Air During December

The following programs of particular interest to school people are arranged by the Columbia Broadcasting System and the National Broadcasting Company. All programs are listed in Eastern Standard Time.

Daily

12:30-1:15 p.m.—National Farm and Home Hour (NBC Blue).[1]

Monday

2:30-3:00 p.m.—American School of the Air, "Frontiers of Democracy" (CBS).

3:00-3:45 p.m.—Rochester Civic Orchestra (NBC Blue).

5:45-6:00 p.m.—"New Horizons," sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Science in the News (NBC Red).

7:45-8:00 p.m.—Science on the March (NBC Blue).

9:00-9:30 p.m.—Dorothy Thompson (NBC Red).

10:30-11:00 p.m.—National Radio Forum (NBC Blue).

Tuesday

12:45-1:15 p.m.—Music Makers, conducted by Dr. Joseph E. Maddy. Elementary, 12:45-1:00 p.m.; advanced, 1:00-1:15 p.m. (NBC Red).

1:30-1:45 p.m.—General Federation of Women's Clubs, consumers' program (NBC Red).

2:00-2:30 p.m.—Science Everywhere. Junior science. Elementary, 2:00-2:15 p.m.; advanced, 2:15-2:30 p.m. (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "The Music of America" (CBS).

2:30-3:00 p.m.—NBC Music Guild (NBC Blue).

5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

7:45-8:00 p.m.—The Roving Prof. William Montgomery McGovern discusses little known sidelights of life around the globe (NBC Red).

Wednesday

2:00-2:30 p.m.—Your Health, sponsored by the American Medical Association (NBC Blue).[2]
Dec. 7—Tuberculosis and the Teens.
Dec. 14—What Shall We Eat?
Dec. 21—Hidden Treasures in Foods.
Dec. 28—Good Milk, Good for You.
Jan. 4—Fool's Gold.

2:30-3:00 p.m.—American School of the Air, "The Lives Between the Lines" (CBS).

5:15-5:30 p.m.—So You Want to Be—Possible careers for high school pupils (CBS).

5:45-6:00 p.m.—Exploring Space, sponsored by the American Museum of Natural History (CBS).

6:00-6:15 p.m.—Our American Schools, dramatizations tracing growth and development of the nation's school system, Belmont Farley, narrator (NBC Red).

6:30-6:45 p.m.—Music Is My Hobby (NBC Red).

7:30-7:45 p.m.—Living History, CBS adult education series.

9:30-10:00 p.m.—Wing for the Martins. What modern education has to say on the problems of children and youth in "finding their wings." Sponsored by the U. S. Office of Education and the National Congress of Parents and Teachers (NBC Blue).

Thursday

2:30-3:00 p.m.—American School of the Air, "This Living World" (CBS).

4:00-4:15 p.m.—Of Men and Books. Prof. John Frederick of Northwestern University reviews books and interviews guest authors (CBS).

5:30-6:00 p.m.—Let's Pretend, a program of fairy stories for children (CBS).

6:00-6:15 p.m.—Operalogue broadcasts of the Metropolitan Opera Guild, designed to aid radio audiences in enjoying opera broadcasts (NBC Red).

8:30-9:30 p.m.—Rochester Philharmonic Orchestra with Jose Iturbi as conductor will be heard December 1, January 12 and 19, February 9, March 2 and 16 (NBC Blue).

8:30-9:15 p.m.—Eastman School of Music Orchestra under the direction of Dr. Howard Hanson and Paul White will be heard on December 8 and 15, January 5 and 26, February 2, 16 and 23, March 9, 23 and 30, April 6, 20 and 27 (NBC Blue).

9:30-10:30 p.m.—America's Town Meeting of the Air, George V. Denny Jr., moderator (NBC Blue).

10:30-11:00 p.m.—Americans at Work, interviews with workers in representative jobs, CBS adult education series.

Friday

2:00-3:00 p.m.—Walter Damrosch Music Appreciation Hour (NBC Blue).

2:30-3:00 p.m.—American School of the Air, "New Horizons" (CBS).

7:15-7:30 p.m.—National Youth Administration (NBC Blue).

7:30-7:45 p.m.—Adventures in Science, Dr. Lawrence Kelso Frank, sociologist, commentator, CBS adult education series.

Saturday

10:30-10:45 a.m.—The Child Grows Up (NBC Blue).

10:45-11:00 a.m.—Florence Hale's talks, directed to parents, explaining methods of classroom procedure so that education may continue at home as well as in school (NBC Red).

11:00-11:30 a.m.—No School Today, a new safety program for children (NBC Red).

11:30 a.m.-12:00 noon—Milestones in the History of Music, Eastman School of Music program (NBC Red).

12:00 noon-12:25 p.m.—American Education Forum. Conducted by Dr. Grayson Kefauver, professor of education, Stanford University (NBC Blue).

12:00-12:30 p.m.—NBC Music Guild (NBC Red).

1:15-5:00 p.m.—Metropolitan Opera (NBC Red).

7:45-8:00 p.m.—Lives of Great Men, Dr. Edward Howard Griggs (NBC Red).

8:30-9:00 p.m.—Original Plays (NBC Red).

10:00-11:30 p.m.—NBC Symphony Orchestra under direction of Arturo Toscanini (NBC Blue).

Sunday

10:30-11:00 a.m.—Music and American Youth, programs given by public school children from cities all over the country (NBC Red).
Dec. 4—Los Angeles, Louis W. Curtis, chairman.
Dec. 11—Kansas City, Mabelle Glenn, chairman.
Dec. 18—Philadelphia, George Lindsay, chairman.

12:30-1:00 p. m.—University of Chicago Round Table (NBC Red).

1:00-2:00 p.m.—Great Plays, masterpieces of the drama (NBC Blue).
Dec. 4—The Cid.
Dec. 11—Life Is a Dream.
Dec. 18—Bourgeois Gentilhomme.

2:00-2:30 p.m.—Americans All, Immigrants All, sponsored by the U. S. Office of Education. Dramatization of the contributions which the successive waves of immigrants have brought to the United States, written by Gilbert Seldes (CBS).

3:00-5:00 p.m.—New York Philharmonic Symphony Orchestra, John Barbirolli, conducting (CBS).

4:30-5:00 p.m.—The World Is Yours, dramatic series sponsored by the Smithsonian Institute (NBC Red).

6:00-6:30 p.m.—Music for Fun (CBS).

6:00-7:00 p.m.—New Friends of Music concerts broadcast from Town Hall, New York, continuing until February 19 (NBC Blue).

8:00-8:30 p.m.—The Peoples' Platform, dinner guests of Prof. Lyman Bryson of Columbia University from all walks of life talk over current questions (CBS).

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[1] Except Sunday.

[2] Owing to program conflicts, there will be no Chicago broadcast of the network program. Instead, a recording of the program will be broadcast over Station WENR at 8 p.m. each Wednesday.

RESEARCH

More Rural Problem Children

Rural schools reported nearly twice as many problem children as schools in small cities and towns in a survey conducted by University of Michigan sociologists in Branch County, Michigan, recently. Of 3363 children enrolled in the schools covered by the survey, 401, or 11.9 per cent, were listed as problem children. Of 1109 children in country schools, 191, or 17.2 per cent were listed as "maladjusted." In the urban schools, 210, or 9.3 per cent, of 2254 boys and girls were problem cases. Reports were collected from 126 of Branch County's 195 school teachers during the survey.

Politics in Appointments

One Kentucky teacher out of six who taught last year either bought his position or had a relative connected with the school system, according to the teacher's own admissions, it has been revealed in a study just completed by Maurice F. Seay, director of the bureau of school service, University of Kentucky. That ethics of Kentucky teacher employment has been improving is indicated by Professor Seay's compilation which shows that while in 1932-33 roughly one-third of the teachers questioned either bargained for their jobs or had relatives connected with the school system, in 1937-38 the figure had dropped to 16.4 per cent, or approximately one teacher in every six.

FINANCE

Kansas Recovery Retarded

Salaries of Kansas teachers have not made the recovery that it is generally believed they should have made toward restoration of the 1930 salary scale. Neither has there been any consistency in the way in which restoration has been made to the several classes of teachers.

The foregoing conclusions are drawn from a comparative study of the college preparation, teaching combinations and salaries of Kansas high school teachers by Frank L. Irwin, published as a bulletin of information of the Kansas State Teachers College of Emporia.

The 1938 average is still only 76 per cent of the 1930 average.

The vocational agriculture teachers are within 21 per cent of the 1930 level; the home economics teachers are within 26 per cent of that level; the English teachers are within 17 per cent of that level; the industrial arts and science teachers lag to 29 per cent and 31 per cent, respectively, of the 1930 level.

The percentages of restoration throw the rankings off considerably in the two periods under consideration in this study. Vocational agriculture teachers are still the best paid group. Industrial arts teachers have slipped from second to third place and physical education teachers' salaries have jumped from third to second place among all the teachers. Home economics teachers were the lowest paid group in 1930 but that place is now given to the music teachers.

GIFTS

Tenth College at Yale

A bequest to Yale University by Frederick W. Vanderbilt, who died June 29, will provide funds for the erection of Silliman College, the tenth college for the university. Eggers & Higgins, New York architects, have been appointed to prepare plans for the college.

Estate to Lindenwood

The entire estate of approximately $100,000 left by the late Mrs. John L. Roemer to her husband, Doctor Roemer, president of Lindenwood

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After a thorough investigation of the evidence for and against at the close of the last period of acceptance, the Council on Pharmacy and Chemistry of the American Medical Association again reaccepted (1935)
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College for Women at St. Charles, Mo., was donated to the college for the erection of a fine arts and music building to cost $200,000. Mrs. Roemer was dean of students for twenty-four years.

NAMES IN NEWS

Superintendents

Regina C. M. Burke has been made associate superintendent of schools in New York City. Miss Burke, who has been in the city schools' service since 1900 and who has served as assistant superintendent, fills the vacancy caused by the death of Dr. John S. Roberts.

Frank A. Jensen, superintendent, La Salle-Peru Township High School and Junior College, La Salle, Ill., was elected trustee of the University of Illinois at the November popular elections. He ran as a candidate on the Democratic ticket.

John A. Sexson, president of the American Association of School Administrators, recently appointed Raymond C. Burdick, superintendent of schools, Huntington, N. Y., as chairman of the board of tellers. Other members of the board are E. W. Broome, superintendent of schools, Rockville, Md., and Omar Carmichael, superintendent of schools, Lynchburg, Va.

Ralph H. Wentworth, principal of New Haven High School, New Haven, Conn., since 1931, has assumed his new duties as assistant superintendent of schools at New Haven. Concurrently with Mr. Wentworth's appointment, Irving N. Countryman, former head of the afternoon session at the high school, was elevated to the principalship.

Florence Eckert recently was the victor in a quiet race for county superintendent of public instruction at Topeka, Kan.

F. R. Harris will retire as superintendent of schools at Greenfield, Ohio, at the end of the 1938-39 school term. B. R. Duckworth, principal of the McClain High School, Greenfield, since 1923, will succeed Mr. Harris in the superintendency.

Franklin P. Hawkes, principal of the Junior High School West, Arlington, Mass., was chosen superintendent of schools at Abington, Mass., recently.

J. Fred Essig, superintendent of schools, Grand Junction, Colo., was elected director of the western division of the Colorado Education Association for a term of three years.

Dr. Robert T. Bapst, superintendent of schools, Buffalo, N. Y., was elected president of the western zone, New York State Teachers Association at its fall meeting in Buffalo. Dr. Frederick J. Moffitt, superintendent of schools, Hamburg, N. Y., was chosen vice president, and Mary E. Crofts, supervisor of secondary mathematics in Buffalo public schools, secretary.

Arthur E. Boudreau has been appointed superintendent of schools at Winthrop, Mass., to succeed Edward R. Clarke, who died suddenly. Mr. Boudreau, who had been acting superintendent during Mr. Clarke's illness, was principal of Winthrop High School.

Floyd Souders for six years a teacher in the schools of Cheney, Kan., has been chosen as superintendent of schools in that city to succeed G. R. Umbarger, who resigned.

Principals

Dr. Abraham Lefkowitz has been made principal of the Samuel J. Tilden High School, Brooklyn, N. Y.

A. B. LeFevre, high school instructor, has been appointed principal of the Cedar Bayou High School, Cedar Bayou, Tex., to succeed Lamar Oltman, who resigned.

Henry T. Hollingsworth, principal of Park School, Bloomfield, N. J., has been appointed principal of the new

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junior high school that is to be erected at Bloomfield at a cost of $1,200,000.

FRANK LEATHERMAN has been named principal of the high school at Norwich, Kan., to succeed A. S. RICHERT, who resigned to accept a position in the East High School at Wichita, Kan.

REV. T. GERALD MULQUEEN, principal of Catholic Central High School, Troy, N. Y., was appointed to the state examinations board by the New York State Board of Regents to succeed the late REV. EDMUND A. O'CONNOR of Little Falls, N. Y.

D. WILLARD ZAHN, principal of the Barry School, Philadelphia, has become principal of the Vaux Junior High School, Philadelphia, succeeding MARGARET T. MAGUIRE, who was transferred to Vare Junior High School.

WEBSTER W. KEEFE has been appointed supervising principal of Westchester County's newest high school at Somers, N. Y. He succeeds JOHN EVANS, who was accidentally killed.

State Departments

JOHN A. WIELAND was reelected state superintendent of public instruction in Illinois at the November elections.

DR. FRANKLIN H. MCNUTT, director of the division of higher education and certification in the Ohio State Department of Education, has been appointed director of instruction in that department.

In the Colleges

DR. KENNETH B. HAIT, a member of the staff of the college of education, University of Florida, has been appointed head of the department of psychology at the Southwestern Louisiana Institute.

DR. O. C. KUNTZLEMAN, supervising principal of the Porter Township schools, Reinerton, Pa., has resigned to become head of the department of social studies at Keystone State Teachers College, Kutztown, Pa.

DR. CHARLES E. PRALL, dean of the school of education, University of Pennsylvania, is making a year's study of higher education in England and Scotland. DR. FRANK W. SCHOCKLEY is acting dean during his absence.

GEORGE F. EKSTROM, who has been Iowa state supervisor of vocational agriculture for the last eleven years, has accepted an appointment as assistant professor of vocational education at the University of Minnesota.

DR. FRANK H. FINCH has resigned as director of vocational rehabilitation and special study in the Ohio State Department of Education to establish graduate courses in guidance and personnel at the University of Illinois.

DR. SPENCER SHANK, assistant dean of the Teachers College, University of Cincinnati, has been appointed director of admissions.

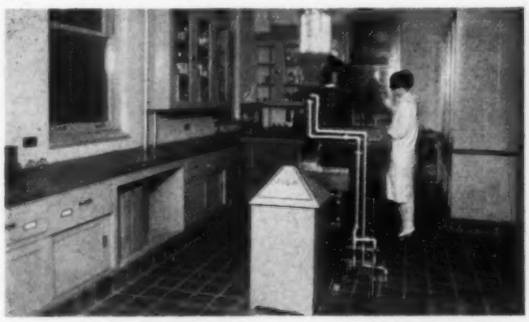
Miscellaneous

DR. ROBEN J. MAASKE, professor of education at the University of North Carolina, has been appointed editor of the *High School Journal,* a publication issued monthly during the school year and devoted to materials in the field of secondary education.

DR. JOHN J. SHEAHAN, chairman of the committee on instruction of the St. Louis schools, has been named president of the board of education.

MELVIN R. HORTON, Peekskill, N. Y., was elected president of the New York State School Boards Association when it met in Syracuse during late October. RUSSELL M. L. CARSON, Glens Falls, was chosen vice president of the city section; FRED C. SPRICKMAN, Kenmore, vice president of the village section; CLYDE B. MOORE, Ithaca, vice president of the rural section, and HOMER BROWNING, Amherst, treasurer.

DR. CHARLES H. JUDD, retired chairman of the department of education, University of Chicago, has been appointed director of education for the National Youth Administration.



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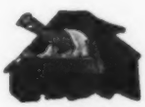

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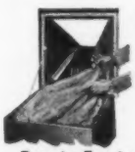

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Food Service Directors in Fourth Annual Conference

(Continued from page 57)

ice equipment. "Methods of fabrication have undergone great changes," he explained, "some so recent that they have not yet been proved." Mr. Blickman urged the importance of drawing specifications properly, having them complete and specific.

Discussing this subject further, Katharine W. Harris, Cornell University, offered several concrete suggestions based on her own experience. Undershelves and drawer space should be limited, she advised. She declared that it is better to provide storage space for dishes behind the counter rather than beneath it. Keep sinks small and shallow was her suggestion. Also include a large long soaking sink for pots and pans. Doors on food warmers should be of drop construction rather than the sliding type; she urged that, above everything else, plenty of room be provided for connections, making them accessible.

Improvement in growing vegetables and fruits, especially for canning, was described by Paul M. Williams, senior marketing specialist, U. S. Department of Agriculture. As evidence of this progress, the string bean now comes guaranteed stringless. Likewise, improvements have been made in containers. The grading problem, too, is well on its way toward solution. The aim of the department, according to Mr. Williams, is to have foods sold for what they are. Not all can be top grade. There is, in fact, a definite place for second grades, but they should be sold as such.

The most interesting of the features of each day's sessions were the reports and discussion of conference studies. Plans of cafeteria layouts, large and small, were thrown on the screen and described in detail by Mary deGarmo Bryan, who proceeded to point out their good points and bad. Other subjects assigned for study and similarly presented before the visitors were: dishwashing compounds and laws on dishwashing and sterilization, Marian C. Allen, John Marshall High School, Cleveland; score card on sanitation, Olive Fay, East High School, Rochester; health promotion, Mary Spalding, Massachusetts Department of Public Health; finance, Dorothea Behm, Syracuse, and uniforms, Edna Gilbert, Rayen School of Youngstown, Ohio.

The annual banquet held at the Oak Hill Country Club was the big social event of the convention with Miss Hart and Laura Comstock, nutritionist of the Eastman Kodak Company, presiding. Every corner of the large dining room was filled to receive the official greetings of James M. Spinning, superintendent of schools, Rochester; Mary Pascoe Huddleson, editor, *Journal of the American Dietetic Association;* Helen Judy Bond, president, American Home Economics Association, and Etta H. Handy, president, Rochester Dietetic Association. Speakers of the evening were: Dr. Lydia J. Roberts, University of Chicago, who spoke on "Good Nutrition for the School Child," and Mary G. McCormick, New York State Department of Education, who discussed "Educational Possibilities of the School Lunchroom."

Then there was the annual luncheon with Jessie Winchell Tickell, director of home economics, Rochester board of education, presiding and brief words of welcome by Harold E. Akerly, assistant superintendent of schools, Rochester, and Manie Lynde, president, Rochester Home Economics Association.

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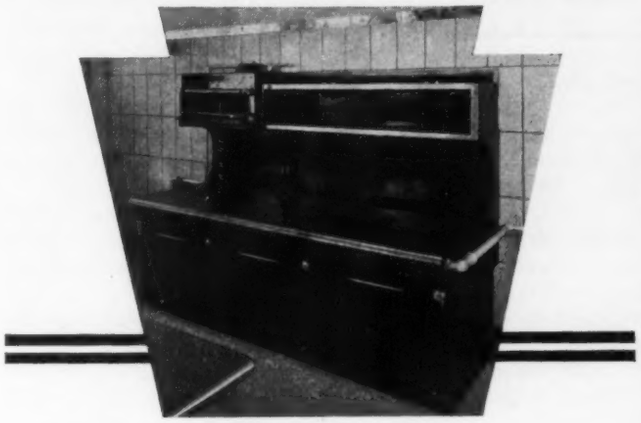

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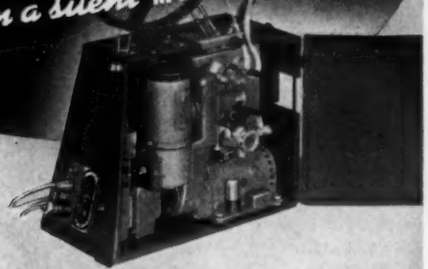

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PRINCIPLES OF SCHOOL ADMINISTRATION. *An Introductory Text. By Dennis H. Cooke, Ray L. Hamon and Arthur M. Proctor. Minneapolis: Educational Publishers, Inc.,* 1938. *Pp.* viii+536. $2.75.

Designed particularly to acquaint teachers with the nature and purposes of public school organization. A compact treatment.

PSYCHOLOGICAL FOUNDATIONS OF PERSONALITY. *A Guide for Students and Teachers. By Louis P. Thorpe. First Edition. New York: McGraw-Hill Book Company, Inc.,* 1938. *Pp.* xvi +602. $3.50.

New text in teacher training that attempts sensibly to treat personality from the psychologic point of view. Well-organized, clear and easy of comprehension.

THE RURAL TEACHER'S WORK. *By John R. Slacks. Boston: Ginn and Company,* 1938. *Pp.* xv+413. $2.25.

Valuable material for the rural teacher in the one room school in bringing together in convenient form description of those numerous activities in which the independent teacher must engage.

WHEN HOME AND SCHOOL GET TOGETHER. *By Tracy W. Redding. New York: Association Press,* 1938. *Pp.* ix+115. $1.25.

The importance of the parent in character education, which is easily possible through the parent-teacher association, is presented in convincing fashion. Highly recommended.

ON GOING TO COLLEGE. *A Symposium. New York: Oxford University Press,* 1938. *Pp.* 298. $2.50.

Designed as a valuable guide to beginning college students who want to make the most of their opportunities but find little enlightenment from institutional catalogs. Valuable addition to orientation literature in secondary school guidance.

POWER: A NEW SOCIAL ANALYSIS. *By Bertrand Russell. New York: W. W. Norton & Company,* 1938. *Pp.* 315. $3.

Clear-cut and pungent analysis of what the philosopher rightfully considers the vital factor in social organization and development—the power principle, its nature, growth and possibilities. A significant contribution to political and social philosophy.

COOK AT HOME IN CHINESE. *By Henry Low. New York: The Macmillan Company,* 1938. *Pp.* 274. $2.50.

An authentic collection of Chinese food recipes for those who prefer oriental cooking. Should be particularly attractive to domestic science teachers.

THE NATION'S FORESTS. *By William Atherton Du Puy. Illustrated. New York: The Macmillan Company,* 1938. *Pp.* vii+264. $3.

The relation of American forests to the recreational and economic life of the people is well presented by one who has a sincere feeling for them. Valuable as secondary library reference text.

PATTERNS OF SURVIVAL: AN ANATOMY OF LIFE. *By John Hodgdon Bradley. New York: The Macmillan Company,* 1938. *Pp.* 223. $2.25.

A search for basic principles of living among the knowledge that science has slowly been collecting. Readable, arresting and challenging.

READING THE PRICE TAGS OF LIFE. *By M. K. Wisehart. New York: Blue Ribbon Books, Inc.,* 1938. *Pp.* xii+ 368. $1.94.

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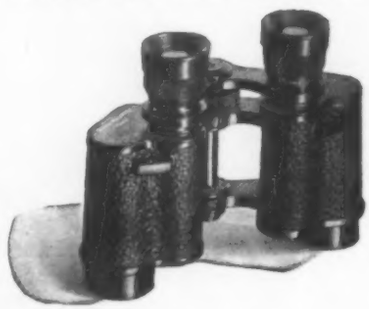

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In which an earnest attempt is made to define in simple terms the purposes of public education for democracy.

Just Off the Press

GENERAL SEMANTICS. *Papers from the First American Congress for General Semantics. Collected and Arranged by Hansell Baugh. With an introductory Outline of General Semantics by Alfred Korzybski. New York: Arrow Editions,* 1938. *Pp.* 111. *Lithographed.* $2.

LE FRANCAIS EXPLIQUE. *By Albert L. Cru. New York: Silver Burdett Company,* 1938. *Pp.* xii+220. $1.16.

COMMUNITY INTERESTS. *By Samuel Berman, Jane Eayre Fryer and J. Lynn Barnard. Grade 5. The Young American Civic Readers. Philadelphia: The John C. Winston Company,* 1938. *Pp.* xii+274. $0.80.

COMMUNITY HELPERS. *By Samuel Berman, Jane Eayre Fryer and J. Lynn Barnard. Grade 3. The Young American Civic Readers. Philadelphia: The John C. Winston Company,* 1938, *Pp.* xii+244. $0.72.

COMMUNITY ACTIVITIES. *By Samuel Berman, Jane Eayre Fryer and J. Lynn Barnard. Grade 4. The Young American Civic Readers. Philadelphia: The John C. Winston Company,* 1938. *Pp.* xii+251. $0.76.

TEACHING WITH MOTION PICTURES. *A Guide to Sources of Information and Materials. By Mary E. Townes. Library Contributions, No.* 1. *New York: Bureau of Publications, Teachers College, Columbia University,* 1938. *Pp.* 25. $0.25 *(Paper Cover).*

THE PREPARATION AND IN-SERVICE TRAINING OF COLLEGE TEACHERS. *Edited by William S. Gray. Volume X. Proceedings of the Institute for Administrative Officers of Higher Institutions,* 1938. *Chicago: The University of Chicago Press,* 1938. *Pp.* viii+230. *Lithoprinted.* $2 *(Paper Cover).*

A STUDY OF THE TRANSPORTATION OF HIGH SCHOOL PUPILS IN WISCONSIN. 1937-1938. *By John Guy Fowlkes and George S. Beery. Madison, Wis.: Department of Public Instruction,* 1938. *Pp.* xi+84. *(Paper Cover).*

LABORATORY TECHNIQUES OF TEACHING. *The Contribution of Research to Teachers Planning the Individualization of Instruction. By the Members of Education 335-336M, 1937-1938, with an Introduction by Thomas H. Briggs. New York: Bureau of Publications, Teachers College, Columbia University,* 1938. *Pp.* 81. $0.90 *(Paper Cover).*

EDUCATIONAL BROADCASTING, 1937. *Edited by C. S. Marsh. Proceedings of the Second National Conference on Educational Broadcasting. Chicago: The University of Chicago Press,* 1938. *Pp.* xx+387. $3.

INSTRUCTOR'S MANUAL. *Prepared by Lawrence Abbott. For Use in N.B.C. Music Appreciation Hour, Eleventh Season:* 1938-39. *Conducted by Walter Damrosch. New York: National Broadcasting Company, Inc.,* 1938. *Pp.* 64. $0.25 *(Paper Cover).*

VOCATIONS IN SHORT STORIES. *By Vera Eleanor Morgan. Preliminary Edition. Chicago: American Library Association,* 1938. *Pp.* 47. $0.50 *(Paper Cover).*

CENTERVILLE. *By Paul R. Hanna, Genevieve Anderson and William S. Gray. Social Studies Book Three, Curriculum Foundation Series. Illustrated. Chicago: Scott, Foresman and Company,* 1938. *Pp.* 288. $0.92.

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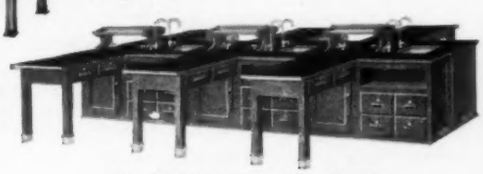
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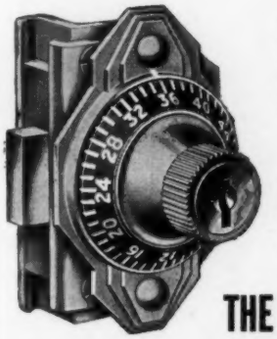

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No-Draft Ventilation

Scientific draft control plus 100 per cent ventilation is being demonstrated by the MacDonald Hardware Manufacturing Company, 975 Harrison Street, San Francisco, on a Dalmo-Simplex Automatic window. The construction of this multiple-operating type window is described in a series of illustrations in a bulletin recently issued. These illustrations show the ease with which it may be operated and the principles of draft control and indirect diffused lighting on which the window is based. To protect the occupants of a room from direct drafts, open the upper two sash and close the lower sash. Nearly reversible sash make the window easily cleaned, minimize risk to window washers and reduce reglazing costs.

"Showerway"

To provide a convenient means for washing the hands and face and to keep dishes hot for the noon-day lunch, the Showerway Company, 1225 Nicollet Avenue, Minneapolis, has manufactured a new unit. Designed for rural schools, this unit is heated either by electricity or oil. It consists of a stainless steel tank fitted with a chipproof bowl. Water is poured into the tank as needed, only ¼ pint, approximately, being required for a complete hand wash. By stepping on a foot pedal at the front of the machine, a fine spray of warm water is ejected. One push on a plunger at the side of the basin releases a supply of soap sufficient for a complete wash. The food warming unit is located in the top of the tank. It consists of an expanded metal tray and 32 one and a half cup hot lunch jars, properly numbered for individual use. The heating element in the tank keeps the food hot.

Scouring Powder Distributor

This distributor is designed to eliminate waste and prevent the dust and sneezes that follow hand scattered powder. It is manufactured by the S. C. Lawlor Company, 122 North Aberdeen Street, Chicago. The distributor is a slotted cylinder, 30 inches wide, designed to spread the scouring powder directly on the floor so that every inch of space receives proper soaping. It has a regulated feature to control the flow of any texture of powder to meet the various floor requirements.

New Water Color Box

The new Prang water color box opens easily but closes securely enough to keep brushes and contents intact. It is offered by the American Crayon Company, Sandusky, Ohio. The cover has five depressions of varying sizes to form convenient mixing pans. The strip of color pans is easily removable, giving plenty of additional room in the bottom of the box for mixing larger

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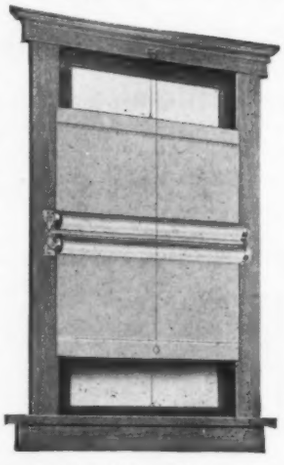

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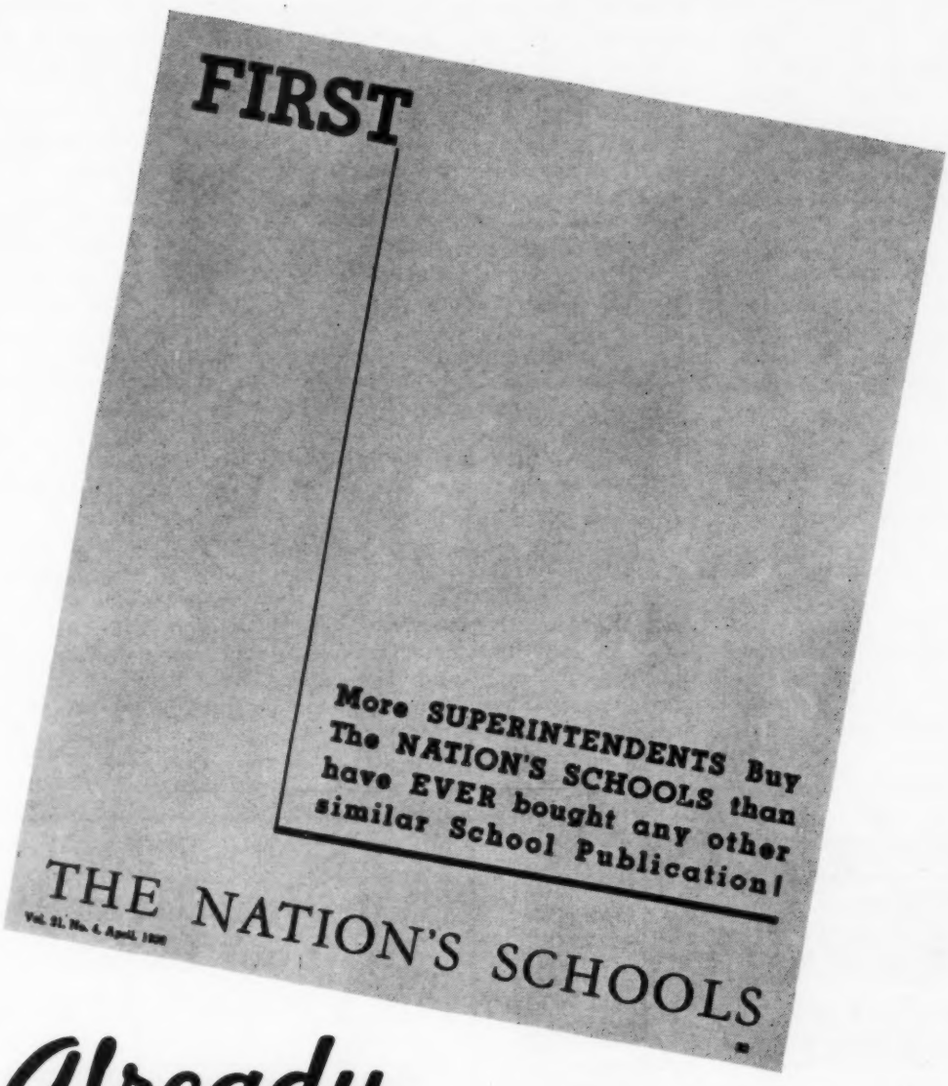
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amounts of color. Space between the color pans makes it easier to take out the colors. The corners of the box are rounded to ensure easy cleaning and to reduce waste.

Easy Comfort

The younger generation lacks the spartan spirit of its forbears. Certainly modern youngsters would go on strike if they had to shiver through the winter with no more heat than that produced by the old iron stove in the middle of the room, though it may have been good enough for Grandma. Today heat, and plenty of it, is the demand on cold winter days, a demand that doubtless contributes to the prosperity of the Detroit Stoker Company, General Motors Building, Detroit, which offers "all the steam you want when you want it."

Detroit stokers, it is asserted, are flexible in operation. Boilers can be taken from a banked condition to full rating in a few minutes without smoke. Fire can be banked with a minimum amount of coal.

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For Safer Swimming Pools

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The manufacturer claims that it costs only 10 or 15 cents a day to operate this sterilizer on an ordinary indoor pool. The sterilizer is also said to eliminate all vented vaults and other regulations prescribed by law when free chlorine gas is used, and may be safely and efficiently operated by anyone.

A new bulletin illustrating this apparatus will be sent without charge upon request to the manufacturer.

Generalities

The SPENCER LENS COMPANY, Buffalo, N. Y., decided last spring to increase its facilities, estimating at that time that it would need double the amount of space available in its present building. Ground was broken on October 7 in Cheektowaga, N. Y., (a suburb of Buffalo) for a new building in which mechanical parts will be manufactured. It will occupy the northeast corner of the 25 acre tract purchased by the company last spring. The new building, it is estimated, will double the production capacity of the company. The general offices, research and development division, lens, assembly and final inspection departments will be expanded in the present plant at 19 Doat Street, Buffalo.

Robert H. Unseld, a former American vice-consul in Surabaya, Java, has been appointed assistant advertising manager of the BELL AND HOWELL COMPANY, Chicago. Mr. Unseld joined the organization four years ago as manager of the personal equipment division. He also contributed articles to the house publications, "Filmo Topics" and "Selling Filmo," and became associate editor. In his new position, he will assume supervision of various special activities of the advertising department.

Other new appointments announced by Bell & Howell are those of P. N. Burton, who has recently joined the educational division of the company, and Roy F. Scott, who has been promoted to the position of assistant manager of the sales department educational division.

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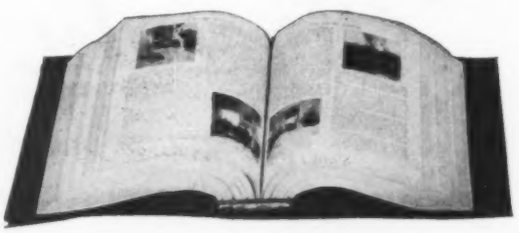

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